

of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:21:10 ON 27 APR 2007

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'CAPLUS' ENTERED AT 10:21:28 ON 27 APR 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Apr 2007 VOL 146 ISS 19

FILE LAST UPDATED: 26 Apr 2007 (20070426/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s oxetane

L1 4682 OXETANE

=> s acryloyl

L2 11113 ACRYLOYL

=> s l1 and l2

L3 28 L1 AND L2

=> d 1-28 bib abs

L3 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2007:116310 CAPLUS

DN 146:172007

TI Fabrication of optical members including index-different sections with variety of shape

IN Koho, Satoshi; Eriyama, Yuichi

PA Jsr Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2007025091	A	20070201	JP 2005-205132	20050714
PRAI	JP 2005-205132		20050714		

AB The process involves these steps; applying compns. of (A) radical monomers, (B) radical initiators, (C) cationic polymerization monomers, and optionally (D) cationic photopolymn. initiators on supports, exposing the same to light in atmospheric containing ≥ 1 volume% O, and heating or exposing the same to light with different wavelength from that of the former, to form polymers of C around and/or upon the preformed polymers of A. The C polymers have smaller n than that of A polymers. Waveguides or microlens arrays can be manufactured as above without development stage.

L3 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:1031534 CAPLUS

DN 145:357658

TI Thermally radical- and thermally cationic-curable vinyl polymer compositions with low viscosity and high mechanical strength

IN Tamai, Hitoshi; Nakagawa, Yoshiki

PA Kaneka Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 44pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2006265483	A	20061005	JP 2005-89220	20050325
PRAI	JP 2005-89220		20050325		

AB The compns., useful for seals and gaskets, comprise vinyl polymers having ≥ 2 O₂CCRa:CH₂ (I; Ra = H, C1-20 organic group) in a mol. containing ≥ 1 I at end groups and epoxides and/or oxetane compds. Thus, a composition comprising acryloyl-terminated Bu acrylate-Et acrylate-2-methoxyethyl acrylate copolymer manufactured by living atom transfer radical polymerization (ATRP) in the presence of CuBr 70, benzoperoxide (Nyper BW) 0.7, 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate (Celloxide 2021P) 30, thermally cationic polymerization catalyst of (2-butenyl)tetramethylenesulfonium hexafluoroantimonate (Adeka Opton CP 77) 0.45 part was hot-pressed into a sheet showing 30% modulus (JIS K 6301) 0.22 MPa, strength at break 1.42 MPa, and elongation at break 115%.

L3 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:489898 CAPLUS

DN 145:9782

TI Coating compositions with good scratch, acid, and solvent resistance for automobile bodies

IN Maeda, Shinichi; Saito, Yoshikazu; Toyama, Masayuki; Hayama, Yasushi

PA Mitsubishi Rayon Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----

PI JP 2006131670 A 20060525 JP 2004-319366 20041102
 PRAI JP 2004-319366 20041102

AB Title coating compns. comprise (A) a compound having a (meth)acryloyl group and an anhydride group formed by at least two carboxylic acid groups or one ester group and a carboxylic acid group, an acrylic copolymer having at least an epoxy group or an oxetane group, and a radical polymerization initiator. Thus, styrene 20, tridecyl methacrylate 15, glycidyl methacrylate 45, and 4-hydroxybutyl acrylate were polymerized to give a copolymer with epoxy equivalent 315 g/equiv and weight average mol. weight 5000, 315 parts of which was mixed with 2-acryloyloxy trimellitic anhydride obtained from 2-hydroxyethyl acrylate and trimellitic anhydride 283, 1-hydroxycyclohexylphenylketone 18, Sanol LS 765 12, tetraethylphosphonium bromide 6, and Modaflow 1.2 parts, applied on a coated steel plate, dried at 160° for 30 min, and irradiated with a UV ray to give a test piece, showing good acid, solvent, and scratch resistance, and gloss retention, and pencil hardness F.

L3 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:199643 CAPLUS

DN 145:505777

TI Development of high performance photo-curable polymers and oligomers using novel reactions of oxetane compounds

AU Nishikubo, Tadatomi; Kameyama, Atsushi

CS Department of Applied Chemistry, Faculty of Engineering, Japan

SO RadTech Europe 05: UV/EB--Join the Winning Technology, [Conference Proceedings], Barcelona, Spain, Oct. 18-20, 2005 (2005), Volume 2, 43-47

Publisher: RadTech Europe Association, The Hague, Neth.

CODEN: 69HVYN

DT Conference; General Review

LA English

AB A review. The authors recently found many new addition reactions of oxetanes with certain reagents such as phenols and carboxylic acids using certain quaternary onium salts or crown ether complexes as catalysts. More recently, we also found new anionic ring-opening polymerization of oxetanes containing pendant hydroxyl groups and alternating anionic ring-opening copolymn. of oxetanes with cyclic carboxylic anhydrides using appropriate catalyst system. These reactions have been widely applied to the synthesis of polymers and thermo-setting reactions of oxetane resins. In this paper, we would like to introduce the application of these new reactions for the synthesis of high performance photo-curable polymers and oligomers containing pendant or terminal (meth)acryloyl groups. The authors also report the photochem. property of the resulting polymers and oligomers. Furthermore, the authors would like to talk about the synthesis of certain calixarenes and poly(imide)s containing oxetane groups as high performance materials and their photochem. reaction.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1075860 CAPLUS

DN 143:368070

TI Photoradically/photocationically curable compositions with low viscosity

IN Okada, Kenji; Nakagawa, Yoshiki

PA Kaneka Corporation, Japan

SO PCT Int. Appl., 65 pp.

CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005092981	A1	20051006	WO 2005-JP5510	20050325
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2561169	A1	20051006	CA 2005-2561169	20050325
	EP 1728826	A1	20061206	EP 2005-727009	20050325
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	CN 1938377	A	20070328	CN 2005-80009881	20050325
PRAI	JP 2004-92556	A	20040326		
	WO 2005-JP5510	W	20050325		

AB Title compns. comprise (A)≥2 acryloyl group-containing vinyl polymers (≥1 acryloyl group is a terminal group), (B) epoxy compds. and/or oxetane compds., (C) photoradical initiators, and (D) photocationic initiators. Thus, Bu acrylate, Et acrylate, and 2-methoxyethyl acrylate were polymerized in the presence of copper (I) bromide, pentamethyldiethylenetriamine, and di-Et 2,5-dibromoadipate, potassium acrylate was added therein and reacted to give acryloyl-terminated copolymer with number average mol. weight 16,900 and polydispersity 1.14, 100 parts of which was mixed with 2,2-diethoxyacetophenone 0.2, Epolite 4000 30, Adeka Optomer SP 172 1.5, and Irganox 1010 1 parts to give a composition with viscosity 150 Pa-s at 23°, which was cured by irradiation to give a cured product, showing 30% modulus 0.52 MPa, tensile strength at break 0.94 MPa, and elongation at break 52%.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:823679 CAPLUS
 DN 143:212295
 TI Preparation of polymerizable (meth)acryloyl group-containing oxetane monomers
 IN Kamata, Hirotooshi; Morinaka, Katsutoshi; Uchida, Hiroshi
 PA Showa Denko K.K., Japan
 SO PCT Int. Appl., 21 pp.
 CODEN: PIXXD2

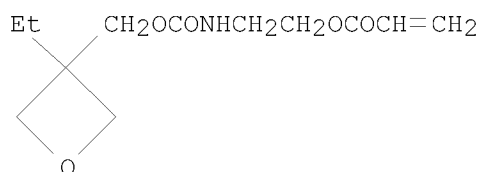
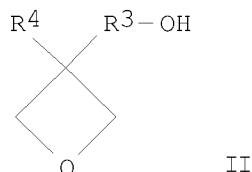
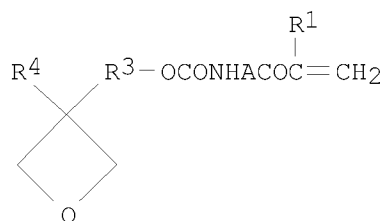
DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005075445	A2	20050818	WO 2005-JP2381	20050209

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2005255671 A 20050922 JP 2005-24723 20050201
 EP 1713787 A2 20061025 EP 2005-710281 20050209
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU

US 2007060760 A1 20070315 US 2006-588072 20060731
 PRAI JP 2004-32867 A 20040210
 US 2004-545488P P 20040219
 WO 2005-JP2381 W 20050209
 OS MARPAT 143:212295
 GI



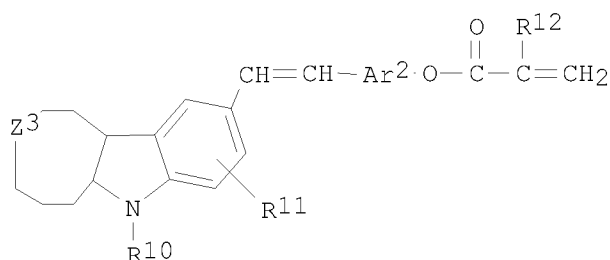
AB Polymerizable (meth)acryloyl group-containing oxetane [I;
 A = OR₂, direct bond; R₂ = divalent hydrocarbyl (which may contain an oxygen atom in the main chain); R₁ = H, CH₃; R₃ = C1-6 (un)branched alkylene; R₄ = C1-6 (un)branched alkyl] monomers are prepared in high yield and selectivity by the addition reaction of (meth)acrylate isocyanates H₂C:C(R₁)CO(A)NCO with 3-(hydroxyalkyl)-substituted oxetanes (II) in the presence of a tertiary amine or tin-compound catalyst. Thus, 2-acryloyloxyethyl isocyanate was mixed in Et acetate containing dibutyltin dilaurate and reacted with 3-ethyl-3-(hydroxymethyl)oxetane, producing an oxetanyl group-containing methacrylate ester monomer (III).

L3 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:428262 CAPLUS
 DN 142:482780

TI Electrically conductive polymers containing condensed indoline rings and
 their manufacture
 IN Kodera, Tatsuya
 PA Mitsubishi Paper Mills, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005126493	A	20050519	JP 2003-361092	20031021
PRAI	JP 2003-361092		20031021		

GI



AB The manufacturing method of polymers, useful for electrophotog. photoreceptors,
 electroluminescent devices, etc., includes polymerizing I (R10 = alkyl, aryl,
 heterocyclic; R11 = H, amino, alkyl, alkoxy; R12 = H, alkyl; Ar2 =
 divalent group; Z3 = group forming saturated C5-8 ring). Manufacturing method
 including polymerizing mixts. of I and XCH2(OCH2CH2)mO2CC:CH2R2 (II; X=
 3-R1-3-oxetanyl; R1,2 = H, alkyl; m = 0-2) are also claimed. Thus, I (R10
 = Ph, R11 = H, R12 = Me, Ar2 = phenylene, Z3 = cyclopentane) and II (X=
 3-R1-3-oxetanyl; R1 = Et, R2 = Me, m = 0) were polymerized in the presence of
 AIBN to give a copolymer with Mn 63,000 and Mw 92,000. A multilayer
 photoreceptor containing charge-transporting layer comprising the copolymer
 showed electrostatic potential -600 V at applied voltage -6 kV and light
 exposure for decreasing the potential in half (E1/2) 1.0 lx-s.

L3 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:155387 CAPLUS
 DN 142:246263
 TI Dental adhesive composition
 IN Anzai, Misaki; Kawaguchi, Motoki
 PA Dentsply-Sankin K. K., Japan
 SO Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1508321	A1	20050223	EP 2004-19518	20040817
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	JP 2005065902	A	20050317	JP 2003-298363	20030822
	US 2005054749	A1	20050310	US 2004-920358	20040818
PRAI	JP 2003-298363	A	20030822		
AB	A dental adhesive composition which can quickly be hardened even in the presence of oxygen without using a radical generating agent such as a peroxide or a photopolymn. initiator, to give high bond strength, comprises a carboxylic acid having a (meth)acryloyl group and a carboxyl group, both of which are attached to an aromatic ring; a bisphenol A derivative having 2 (meth)acryloyl groups; a hydroxylalkyl (meth)acrylate; a (meth)acrylate derivative having an acid group; and at least one polymerization initiator selected from the group consisting of aromatic amines, aliphatic amines, and aromatic sulfinic acids, the composition being substantially free from any radical polymerization initiator. Thus, a composition was obtained from different methacryloyl monomers.				
RE.CNT	10	THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT			

L3 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:13763 CAPLUS
DN 142:103247
TI High-sensitivity shrink-proof holographic recording materials containing epoxides, their manufacture, and their recording
IN Sasa, Nobumasa
PA Konica Minolta Medical & Graphic, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005003958	A	20050106	JP 2003-167597	20030612
PRAI	JP 2003-167597		20030612		
OS	MARPAT 142:103247				
AB	The holog. recording materials contain (A) epoxides containing ≥ 1 substituted oxirane rings on α and/or β sites of oxirane rings, epoxidized fatty acid esters, epoxidized fatty acid glycerides, (B) photopolymn. initiators, and optionally, (C) oxetane ring-containing compds. and/or vinyl ethers, (D) (meth)acryloyl group-containing compds. and photoradical polymerization initiators. The holog. recording materials form matrixes by ≥ 1 polymerization reaction selected from cationic epoxy polymerization, cationic vinyl ether polymerization, cationic alkenyl ether polymerization, cationic arene ether polymerization, cationic ketene acetal polymerization, epoxy-amine step polymerization, epoxy-mercaptan step polymerization, unsatd. ester-amine step polymerization, unsatd. ester-mercaptan step polymerization, vinyl-silicone hydride step polymerization, isocyanate-hydroxyl step polymerization, and				

isocyanate-amine step polymerization In another alternative, the holog. recording materials form matrixes by curing of inorg. or organic matrix precursors which may comprise $R_nM(OR')^{4-n}$ ($M = \geq 3$ -valent metal element, preferably, Si, Ti, Ge, Zr, V, Al; $R = \text{alkyl, allyl}$; $R' = C \leq 4$ lower alkyl; $n = 1, 2$). The holog. recording materials are are manufactured by mixing matrix-forming substances, their curing to give matrixes, and irradiation with actinic light for holog. recording.

L3 ANSWER 10 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:1014409 CAPLUS

DN 142:7357

TI Active energy curable resin compositions with good curability and low reflectance angle for optical disks

IN Makino, Shinji

PA Mitsubishi Rayon Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2004331872	A	20041125	JP 2003-131585	20030509
PRAI	JP 2003-131585		20030509		
AB	Title compns. comprise (A) compds. having ≥ 2 oxetane rings, (B) compds. having ≥ 2 oxirane rings, (C) cationic photoinitiators, (D) compds. having ≥ 1 (meth) acryloyl group, and (E) radical photoinitiators. Thus, a composition comprising OXT 121 25, YD 8125 bisphenol A diglycidyl ether 25, UVI 6990 photoinitiator 3.0, U 2PHA diacrylate 5.0, and Irgacure 184 1.0 parts was applied on a silver-coated Panlite AD 9000TG optical disk and irradiated with a high pressure mercury lamp to give a test piece with reflectance angle 0.16° initially and 0.06° after durability test, transmittance 91% at 400 nm, 93% at 500 nm, and 93% at 700 nm, good surface hardness and reliability.				

L3 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:996235 CAPLUS

DN 141:429659

TI Photocuring/thermosetting ink-jet composition and printed wiring board using same

IN Kakinuma, Masahisa; Kusama, Masatoshi; Ushiki, Shigeru

PA Taiyo Ink Manufacturing Co., Ltd., Japan

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2004099272	A1	20041118	WO 2004-JP6029	20040507
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

EP 1624001 A1 20060208 EP 2004-731714 20040507
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
 CN 1784432 A 20060607 CN 2004-80012609 20040507
 US 2006058412 A1 20060316 US 2005-269836 20051109
 PRAI JP 2003-131742 A 20030509
 WO 2004-JP6029 W 20040507

AB A photocuring/thermosetting ink-jet composition contains (A) a monomer having a (meth)acryloyl group and a thermosetting functional group in the mol., (B) a photoreactive diluent other than the component (A) having a weight-average mol. weight of not more than 700, and (C) a photopolymer.

initiator,
 and has a viscosity of not more than 150 mPa·s at 25°. A solder resist pattern is directly drawn on a printed wiring board by an ink-jet printer using the above-mentioned composition, and the pattern is primarily cured by irradiation with an active energy beam and then further cured by heat.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:1000504 CAPLUS
 DN 141:242819
 TI Product class 4: organometallic complexes of copper
 AU Heaney, H.; Christie, S.
 CS Dept. of Chemistry, University of Loughborough, Loughborough, LE11 3TU, UK
 SO Science of Synthesis (2004), 3, 305-662
 CODEN: SSCYJ9
 PB Georg Thieme Verlag
 DT Journal; General Review
 LA English
 AB A review. The use of copper and related complexes in applications to organic synthesis is reviewed.

RE.CNT 1706 THERE ARE 1706 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

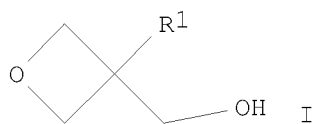
L3 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:929612 CAPLUS
 DN 139:397036
 TI Oxetane-base polyol (meth)acrylates, their curable compositions, and hard coatings containing them with good heat and water resistance
 IN Sauchi, Yasuyuki; Sasaki, Hiroshi
 PA Toa Gosei Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 2003335854	A	20031128	JP 2002-143719	20020517
PRAI	JP 2002-143719		20020517		

GI



AB The invention relates to the (meth)acrylates having ≥ 2 (meth)acryloyl groups manufactured by heat-cationic-polymerizing I ($R_1 = H$, alkyl, aryl, arylalkyl) to obtain polyols and esterifying them with (meth)acrylic acid. Thus, a composition comprising 3-ethyl-3-(hydroxymethyl)oxetane homopolymer acrylate was applied on a substrate and UV-cured to give a coating showing pencil hardness 4H, storage modulus $1.08 + 10^9$ at 210° , and water absorption 1.32%.

L3 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:368907 CAPLUS

DN 138:369365

TI Oxetane-containing (meth)acrylate esters, their manufacture, and their use as dental monomers and monomers for grafting polyolefins

IN Miyazaki, Kazuhisa; Ota, Seiji; Akie, Hideyuki

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

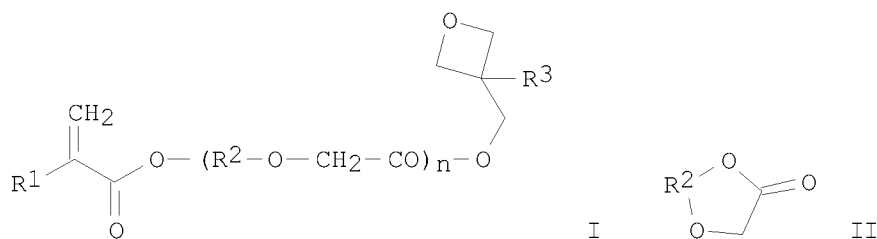
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2003137878	A	20030514	JP 2001-332394	20011030
PRAI	JP 2001-332394		20011030		
OS	MARPAT 138:369365				

GI

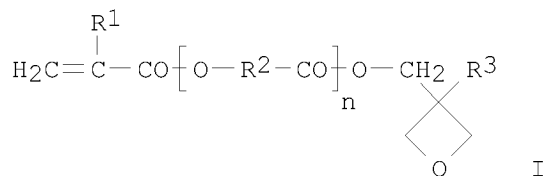


AB Title esters I [$R_1 = H$, Me; $R_2 =$ (ether bond-containing) linear or branched alkylene; $R_3 =$ linear alkyl; $n = 1-4$], useful for coatings and adhesives as well, are manufactured by ring-cleavage esterification of lactones II ($R_2 =$ same as above) with 3-alkyl-3-hydroxymethyloxetane in the presence of base catalysts, followed by esterification of the resulting products with (meth)acryloyl halide. Thus, 1,4-dioxan-2-one was reacted with 3-ethyl-3-hydroxymethyloxetane in the presence of K_2CO_3 to give 28% 3-ethyl-3-oxetanylmethyl 2-hydroxyethoxyacetate, which was esterified with

acryloyl chloride to give 40% 3-ethyl-3-oxetanylmethyl 2-acryloxyethoxyacetate.

L3 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:366797 CAPLUS
 DN 138:369360
 TI Oxetane-containing (meth)acrylate esters, their manufacture, and their use as dental monomers and monomers for grafting polyolefins
 IN Miyazaki, Kazuhisa; Ota, Seiji
 PA Mitsui Chemicals Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 2003137877	A	20030514	JP 2001-330883	20011029
PRAI	JP 2001-330883		20011029		
OS	MARPAT 138:369360				
GI					



AB Title esters I [R1 = H, Me; R2 = (ether bond-containing) linear or branched alkylene; R3 = linear alkyl; n = 1-4], useful for coatings and adhesives as well, are manufactured by transesterification between HO(R2CO2)nR4 (R2, R4, n = same as above) and 3-alkyl-3-hydroxymethyloxetane in the presence of catalysts, followed by esterification of the resulting products with (meth)acryloyl halide. Thus, Et lactate was reacted with 3-ethyl-3-hydroxymethyloxetane in the presence of Ti(OCHMe2)4 to give 80% 3-ethyl-3-oxetanylmethyl lactate, which was esterified with acryloyl chloride to give 89% 3-ethyl-3-oxetanylmethyl 2-acryloxypropanoate.

L3 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:352823 CAPLUS
 DN 139:85711
 TI Combining Covalent and Noncovalent Cross-Linking: A Novel Terpolymer for Two-Step Curing Applications
 AU El-Ghayoury, Abdelkrim; Hofmeier, Harald; de Ruiter, Barteld; Schubert, Ulrich S.
 CS Laboratory of Macromolecular Chemistry and Nanoscience, Eindhoven University of Technology and Dutch Polymer Institute, Eindhoven, 5600, Neth.
 SO Macromolecules (2003), 36(11), 3955-3959
 CODEN: MAMOBX; ISSN: 0024-9297
 PB American Chemical Society
 DT Journal

LA English
 AB A terpolymer of poly(Bu acrylate) bearing terpyridine as well as oxetane units was synthesized by free radical polymerization and characterized using NMR, UV-vis, and GPC. Subsequently, UV-vis expts. indicated clearly a noncovalent crosslinking of the terpyridine moieties by addition of iron(II) ions. Moreover, the ability of covalent crosslinking was studied by polymerizing the oxetane rings utilizing Lewis acids. IR spectroscopy and DSC expts. clearly revealed the success of the combination of both steps when utilizing iron(II) ions and AlCl₃.
 RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:625102 CAPLUS
 DN 137:248043
 TI Atom transfer radical copolymerization (ATRCP) of a monomer bearing an oxetane group
 AU Singha, Nikhil K.; de Ruiter, Barteld; Schubert, Ulrich S.
 CS Lab. Macromolecular Organic Chem., Center Nanomaterials, Eindhoven Univ. Technology, Eindhoven, 5600 MB, Neth.
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2002), 43(2), 165-166
 CODEN: ACPPAY; ISSN: 0032-3934
 PB American Chemical Society, Division of Polymer Chemistry
 DT Journal; (computer optical disk)
 LA English
 AB The atom transfer radical polymerization of Me methacrylate with 3-ethyl-3-(acryloyloxymethyl)oxetane is described. Anal. of the copolymer confirmed that the oxetane ring did not open during polymerization
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:663120 CAPLUS
 DN 136:6399
 TI Synthesis and photochemical reaction of high performance UV curing oligomers
 AU Nishikubo, Tadatomi; Kameyama, Atsushi
 CS Department of Applied Chemistry, Faculty of Engineering, Kanagawa University, Kanagawa-ku, Yokohama, 221-8686, Japan
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2001), 42(2), 722-723
 CODEN: ACPPAY; ISSN: 0032-3934
 PB American Chemical Society, Division of Polymer Chemistry
 DT Journal; (computer optical disk)
 LA English
 AB Calixarene derivs. containing (meth)acrylate, vinyl ether, propargyl ether, oxetane, oxirane, or spiro ortho ester groups were synthesized by reaction of calixarenes with (meth)acrylic acid derivs., vinyl ether compds., propargyl bromide, oxetane derivs., epibromohydrin, and spiro ortho ester derivs. The calixarene derivs. containing photoreactive groups had excellent thermal stability and high photochem. reactivity. The calixarene derivs. are of interest for UV curing systems, e.g., inks, coatings, solder masks, adhesives, and microelectronics uses.
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:143711 CAPLUS
 DN 134:194666
 TI Actinic ray-curable sulfur-containing compositions with good curability
 and manufacture of coatings
 IN Maruyama, Tsutomu
 PA Kansai Paint Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001055507	A	20010227	JP 1999-232626	19990819
PRAI	JP 1999-232626		19990819		

AB The compns. contain (A) 5-100 parts S-containing compds. manufactured by a reaction of compds. (average mol. weight 150-1000) having ≥ 2 SH and compds. having 1 acryloyl group and ≥ 2 alkoxysilyl groups and optional compds. having 1 acryloyl group and ≥ 1 epoxy groups and/or oxetane rings at acryloyl/SH molar ratio 0.5-1.2, (B) 0-95 parts photochem. cationically reactive compds., and (C) 0.05-20 parts photochem. cationic polymerization initiators. Thus, a composition containing 100 parts reaction product of pentaerythritol tetrakis(mercaptoacetate) and 3-acryloxypropyl trimethoxysilane and 4 parts CI 2758 (sulfonium salt-based initiator) was applied on a glass plate and cured by UV-irradiation to give a coating showing pencil hardness 6H.

L3 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:810952 CAPLUS
 DN 132:51248
 TI Photocurable hydrolyzed silane composition and photocured product
 IN Sekiguchi, Manabu; Sugiyama, Naoki; Sato, Hozumi
 PA Jsr Corp., Japan
 SO Eur. Pat. Appl., 38 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 965618	A1	19991222	EP 1999-111732	19990617
	EP 965618	B1	20040102		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000001648	A	20000107	JP 1998-170885	19980618
	JP 2000026730	A	20000125	JP 1998-194817	19980709
	TW 482817	B	20020411	TW 1999-88110061	19990616
	KR 2000006232	A	20000125	KR 1999-22643	19990617
	US 6207728	B1	20010327	US 1999-335269	19990617
	JP 2000109560	A	20000418	JP 1999-219938	19990803
	JP 2000109694	A	20000418	JP 1999-219939	19990803
	JP 2000109695	A	20000418	JP 1999-220750	19990804

PRAI JP 1998-170885 A 19980618
 JP 1998-194817 A 19980709
 JP 1998-220512 A 19980804
 JP 1998-220513 A 19980804
 JP 1998-220514 A 19980804

AB Disclosed is a photo-curable composition comprising the following components (A) to (C): (A) hydrolyzable silane compound represented by the general formula (1) or a hydrolyzate thereof: $(R_1)_pSi(X)_4-p$ (1) wherein R_1 is a non-hydrolyzable organic group having 1 to 12 carbon atoms, X is a hydrolyzable group, and p is an integer of 0 to 3; (B) photo acid generator; and (C) dehydrating agent. By such constitution, it is possible to provide a photo-curable composition which has a rapid photo-curable rate, is excellent in characteristics such as storage stability, heat resistance, weather-ability, scratch resistance and the like, and is applicable to base materials having low heat resistance such as plastics, as well as a cured product obtained therefrom.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:653719 CAPLUS

DN 129:276496

TI Hydrolyzable and polymerizable oxetanesilanes

IN Moszner, Norbert; Volkel, Thomas; Stein, Sabine; Rheinberger, Volker

PA IVOCLAR A.-G., Liechtenstein

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 867443	A2	19980930	EP 1998-250089	19980313
	EP 867443	A3	20000628		
	EP 867443	B1	20030806		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19714324	A1	19981029	DE 1997-19714324	19970325
	DE 19714324	B4	20040902		
	AT 246691	T	20030815	AT 1998-250089	19980313
	CA 2232960	A1	19980925	CA 1998-2232960	19980324
	CA 2232960	C	20020129		
	JP 10330485	A	19981215	JP 1998-77593	19980325
	US 6034151	A	20000307	US 1998-47592	19980325
	US 6096903	A	20000801	US 1998-47659	19980325
	US 6284898	B1	20010904	US 2000-591358	20000609
PRAI	DE 1997-19714324	A	19970325		
	US 1997-52563P	P	19970715		
	US 1997-52605P	P	19970715		
	US 1998-47659	A3	19980325		

OS MARPAT 129:276496

AB The title compds., with specified structure, which can be polymerized at room temperature with very little shrinkage, are prepared Stirring 3-ethyl-3-(hydroxymethyl)oxetane with acryloyl chloride in Et2O containing collidine at room temperature for 6 h gave 50% acrylate

ester, reaction of which with 3-(trimethoxysilyl)-1-propanethiol at room

temperature for 48 h gave 81% (3-ethyl-3-oxetanyl)methyl 3-[[3-(trimethoxysilyl)propyl]thio]propionate (I). Hydrolytic polymerization of an equimolar mixture of I and Me₂Si(OMe)₂ in refluxing EtOH gave a condensate which was used in a dental cement.

L3 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1997:579788 CAPLUS
 DN 127:235757
 TI Coating composition comprising a bicyclo- or spiro-orthoester-functional compound
 IN Van Den Berg, Keimpe Jan; Hobel, Klaus; Klinkenberg, Huig; Noomen, Arie; Van Oorschot, Josephus Christiaan
 PA Akzo Nobel N.V., Neth.
 SO PCT Int. Appl., 69 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9731073	A1	19970828	WO 1997-EP892	19970221
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	NL 1002427	C2	19970826	NL 1996-1002427	19960223
	CA 2247126	A1	19970828	CA 1997-2247126	19970221
	AU 9720930	A	19970910	AU 1997-20930	19970221
	ZA 9701542	A	19980727	ZA 1997-1542	19970221
	EP 882106	A1	19981209	EP 1997-906123	19970221
	EP 882106	B1	20000809		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1214717	A	19990421	CN 1997-193266	19970221
	CN 1128851	B	20031126		
	BR 9707735	A	19990727	BR 1997-7735	19970221
	EP 942051	A2	19990915	EP 1999-201141	19970221
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000506908	T	20000606	JP 1997-529818	19970221
	AT 195331	T	20000815	AT 1997-906123	19970221
	ES 2150758	T3	20001201	ES 1997-906123	19970221
	PT 882106	T	20010131	PT 1997-906123	19970221
	US 6297329	B1	20011002	US 1997-804485	19970221
	RU 2180674	C2	20020320	RU 1998-117558	19970221
	IN 1997MA00954	A	20061006	IN 1997-MA954	19970506
	TW 418241	B	20010111	TW 1997-86111273	19970806
	NO 9803859	A	19981020	NO 1998-3859	19980821
	AU 754919	B2	20021128	AU 2000-56513	20000906
	GR 3034728	T3	20010131	GR 2000-402417	20001030
	US 2002161135	A1	20021031	US 2001-935308	20010822
	US 6593479	B2	20030715		
PRAI	NL 1996-1002427	A	19960223		
	US 1996-15878P	P	19960422		

EP 1997-906123 A3 19970221
 US 1997-804485 A3 19970221
 WO 1997-EP892 W 19970221

AB A coating composition comprises a first compound of ≥ 1 bicyclo- or spiro-orthoester group and a second compound of ≥ 2 hydroxyl-reactive groups. The latent hydroxyl groups of the bicyclo- or spiro-orthoester groups have to be deblocked and reacted with the hydroxyl-reactive groups of the second compound to be cured. Bicyclo-orthoester compds. are made from the corresponding oxetane compound, as are polymers comprising ≥ 1 bicyclo- or spiro-orthoester group. Thus, Desmodur N 3390 was mixed with 1,4-diethyl-2,6,7-trioxabicyclo[2.2.2]octane in the presence of p-MeC₆H₄SO₃H and Bu₂Sn dilaurate in solvent and sprayed onto steel panels showing pot life >1 day and dry time 100 min.

L3 ANSWER 23 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:709842 CAPLUS

DN 125:331792

TI Activation energy-curable coating compositions containing oxetane compounds with improved curability, gloss, adhesion, hardness, and crack resistance

IN Niwa, Makoto; Oota, Hiroyuki

PA Toa Gosei Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

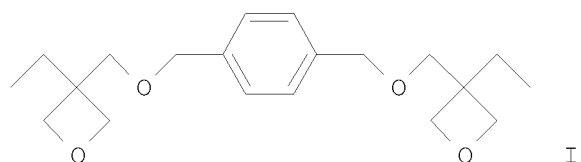
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08239623	A	19960917	JP 1995-64801	19950228
PRAI	JP 1995-64801		19950228		

GI



AB The coating compns. comprise compds. having 1-4 oxetane rings, cationic photopolymn. initiators, and optionally epoxides, vinyl ethers, and (meth)acryloyl compds. Thus, 100 parts compds. having 2 oxetane rings I and 4 parts diphenyl[p-(phenylthio)phenyl]sulfonium hexafluoroantimonate were stirred to give a composition, which was applied to a plywood and exposed to UV to give test pieces with JIS A hardness 7, cross-cut adhesion 8-10, >90% in 60° gloss, pencil hardness 3H, and .apprx.0 crack after thermal crack test (80° for 2 h, -20° for 2 h, repeated 2 times).

L3 ANSWER 24 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:705278 CAPLUS

DN 125:331101

TI Actinic beam-curable adhesive compositions of oxetane compounds

IN Niwa, Makoto; Oota, Hiroyuki
 PA Toa Gosei Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 08231938	A	19960910	JP 1995-61898	19950224
PRAI	JP 1995-61898		19950224		

AB Adhesives for bonding laminates with improved peeling strength and surface appearance contain compds. including 1-4 oxetane rings and photocationic polymerization initiators. Thus, 100 parts p-ROCH₂C₆H₄CH₂OR (R = 2-oxetanylbtyl) and 4 parts p-(Ph₂S)SC₆H₄SPh⁺ SbF₆⁻ were mixed, applied on a biaxially drawn polypropylene (I) film, laminated with an undrawn I film (untreated on the surface), and irradiated with UV to give a test piece showing peeling strength ≥500 g/10 mm and good heat creep resistance.

L3 ANSWER 25 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1996:660747 CAPLUS
 DN 125:279010

TI Active energy-curable oxetane compositions for paper coatings with good gloss, adhesion, wear resistance, and flexibility

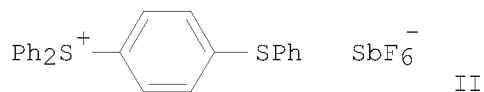
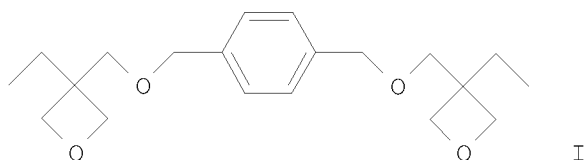
IN Niwa, Makoto; Oota, Hiroyuki
 PA Toa Gosei Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 08218296	A	19960827	JP 1995-50415	19950215
	JP 3364915	B2	20030108		
PRAI	JP 1995-50415		19950215		

GI



AB The compns. comprise compds. having 1-4 oxetane rings, cationic photopolymn. initiators, and optionally epoxides, vinyl ethers, and (meth) acryloyl group-containing compds. Thus, a composition comprising 100 parts

a compound with 2 oxetane rings I and 4 parts an initiator II was applied to a paper and exposed to UV to give test pieces with JIS K 5400 cross-cut adhesion 8-10, no crack by bending test, >90% in 60° gloss, and steel wool abrasion resistance.

L3 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1973:97399 CAPLUS
 DN 78:97399
 TI Reductive cleavage of polycyclic oxetanes
 AU Sauers, Ronald R.; Schinski, William; Mason, Marion M.; O'Hara, Elizabeth; Byrne, Bryan
 CS Sch. Chem., Rutgers State Univ., New Brunswick, NJ, USA
 SO Journal of Organic Chemistry (1973), 38(4), 642-6
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB The action of H and catalysts, Li-ethylenediamine, Li-NH₃, and alane on several polycyclic oxetanes (I, R = H, Ph, CH₂Ph, α -naphthyl) is reported. In general, ring cleavages were effected which produced several novel alcs.

L3 ANSWER 27 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1969:414144 CAPLUS
 DN 71:14144
 TI Oxetane copolymers
 IN Maloney, Daniel E.
 PA du Pont de Nemours, E. I., and Co.
 SO U.S., 4 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	US 3440231	A	19690422	US 1967-610250	19670119
	FR 1551586	A	19681227	FR 1968-1551586	19680117
	NL 6800879	A	19680722	NL 1968-879	19680119
	GB 1154535	A	19690611	GB 1968-1154535	19680119
PRAI	US 1967-610250	A	19670119		

AB Acyl halide- α -olefin copolymers were treated with 3-amino- (I) or 3-hydroxyoxetane to give copolymers which were useful as coatings for decreasing the shrinking tendencies of proteinaceous and cellulosic substrates. Thus, 10 g. of a random ethylene (II)-methacryloyl chloride copolymer was prepared by reacting a chlorinating agent such as PCl₅ with an II-methacrylic acid copolymer, which was obtained by the process of Canadian Patent 655,298, and was dissolved in 450 ml. PhMe at 70°. Et₃N (3.0 ml.) and 3.0 g. I were added to the solution and, after 30 min. at 70°, the copolymer (III) was precipitated by adding excess Me₂CO. A 2% III solution in perchloroethylene was padded onto 8-in. sqs. of cotton poplin, impregnated with 0.01-0.09 weight % Zn(BF₄)₂. The poplin was heated 30 min. at 125°, then refluxed in PhMe. The amount of III on the fabric was reduced from 2.02 weight % to 0.88 weight %, after refluxing 4 hrs., and to 0.82 weight %, after refluxing 8 hrs. An II-Et acrylate-acryloyl chloride terpolymer was reacted similarly with I. The modified copolymer exhibited higher abrasion resistances than the unmodified copolymers and can be molded into weather-resistant films.

L3 ANSWER 28 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1965:480121 CAPLUS
 DN 63:80121
 OREF 63:14690h,14691a-b
 TI Bis(trifluoromethyl)ketene
 AU England, D. C.; Krespan, C. G.
 CS E. I. du Pont de Nemours & Co., Wilmington, DE
 SO Journal of the American Chemical Society (1965), 87(17), 4019-20
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA English
 OS CASREACT 63:80121
 GI For diagram(s), see printed CA Issue.
 AB Heating a mixture of (CF₃)₂CHCO₂H and excess P₂O₅ up to 250° pot
 temps. gives over 90% (CF₃)₂C:C:O (I). I, b. 5°, and CF₂:C(CF₃)COF,
 b. 52°, are in equilibrium in the vapor phase over anionic catalysts
 such as NaF. Cycloaddn. to both the C:C and C:O groups of I can occur.
 Thus, I reacts with CH₂:CHOBz at 100° to give 34% II and 42% III.
 Simple alkenes also add to I to form cyclobutanones and linear adducts. A
 condensed phase is necessary, so lower alkenes require higher pressures.
 A mixture obtained from I and C₃H₆ at 150° and 800 atmospheric, was separated
 by gas chromatography into .apprx.70% cyclobutanone derivative and 30%
 (CF₃)₂CHCOCH₂CH:CH₂. I reacts with trioxane in Et₂O at 150° in the
 presence of ZnCl₂ as catalyst to give IV, and with PhC.tplbond.CH at
 100° to give V. Ir data were given.

=> d his

(FILE 'HOME' ENTERED AT 10:21:10 ON 27 APR 2007)

FILE 'CAPLUS' ENTERED AT 10:21:28 ON 27 APR 2007

L1 4682 S OXETANE
 L2 11113 S ACRYLOYL
 L3 28 S L1 AND L2

=> s l1 and carbamate
 31159 CARBAMATE
 L4 26 L1 AND CARBAMATE

=> s l4 and isocyanate
 66562 ISOCYANATE
 L5 4 L4 AND ISOCYANATE

=> d l-5 bib abs
 'L-5' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB
 ALL ----- BIB, AB, IND, RE
 APPS ----- AI, PRAI
 BIB ----- AN, plus Bibliographic Data and PI table (default)
 CAN ----- List of CA abstract numbers without answer numbers
 CBIB ----- AN, plus Compressed Bibliographic Data

CLASS ----- IPC, NCL, ECLA, FTERM
 DALL ----- ALL, delimited (end of each field identified)
 DMAX ----- MAX, delimited for post-processing
 FAM ----- AN, PI and PRAI in table, plus Patent Family data
 FBIB ----- AN, BIB, plus Patent FAM
 IND ----- Indexing data
 IPC ----- International Patent Classifications
 MAX ----- ALL, plus Patent FAM, RE
 PATS ----- PI, SO
 SAM ----- CC, SX, TI, ST, IT
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
 SCAN must be entered on the same line as the DISPLAY,
 e.g., D SCAN or DISPLAY SCAN)
 STD ----- BIB, CLASS

 IABS ----- ABS, indented with text labels
 IALL ----- ALL, indented with text labels
 IBIB ----- BIB, indented with text labels
 IMAX ----- MAX, indented with text labels
 ISTD ----- STD, indented with text labels

 OBIB ----- AN, plus Bibliographic Data (original)
 OIBIB ----- OBIB, indented with text labels

 SBIB ----- BIB, no citations
 SIBIB ----- IBIB, no citations

 HIT ----- Fields containing hit terms
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
 containing hit terms
 HITRN ----- HIT RN and its text modification
 HITSTR ----- HIT RN, its text modification, its CA index name, and
 its structure diagram
 HITSEQ ----- HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and
 its structure diagram
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 KWIC ----- Hit term plus 20 words on either side
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

ENTER DISPLAY FORMAT (BIB):1-5 bib abs hitstr
 '1-5' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB
 ALL ----- BIB, AB, IND, RE
 APPS ----- AI, PRAI
 BIB ----- AN, plus Bibliographic Data and PI table (default)
 CAN ----- List of CA abstract numbers without answer numbers
 CBIB ----- AN, plus Compressed Bibliographic Data
 CLASS ----- IPC, NCL, ECLA, FTERM
 DALL ----- ALL, delimited (end of each field identified)
 DMAX ----- MAX, delimited for post-processing
 FAM ----- AN, PI and PRAI in table, plus Patent Family data
 FBIB ----- AN, BIB, plus Patent FAM
 IND ----- Indexing data
 IPC ----- International Patent Classifications
 MAX ----- ALL, plus Patent FAM, RE
 PATS ----- PI, SO
 SAM ----- CC, SX, TI, ST, IT
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
 SCAN must be entered on the same line as the DISPLAY,
 e.g., D SCAN or DISPLAY SCAN)
 STD ----- BIB, CLASS

 IABS ----- ABS, indented with text labels
 IALL ----- ALL, indented with text labels
 IBIB ----- BIB, indented with text labels
 IMAX ----- MAX, indented with text labels
 ISTD ----- STD, indented with text labels

 OBIB ----- AN, plus Bibliographic Data (original)
 OIBIB ----- OBIB, indented with text labels

 SBIB ----- BIB, no citations
 SIBIB ----- IBIB, no citations

 HIT ----- Fields containing hit terms
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
 containing hit terms
 HITRN ----- HIT RN and its text modification
 HITSTR ----- HIT RN, its text modification, its CA index name, and
 its structure diagram
 HITSEQ ----- HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and
 its structure diagram
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 KWIC ----- Hit term plus 20 words on either side
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

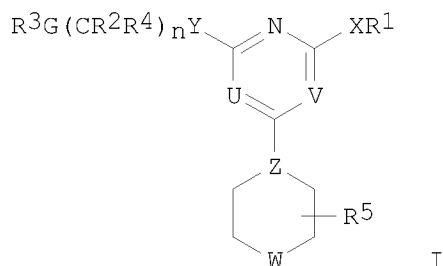
All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC

to view a specified Accession Number.
 ENTER DISPLAY FORMAT (BIB):bib abs

L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:54836 CAPLUS
 DN 144:128998
 TI Preparation of morpholinopyrimidines and related compounds as modulators
 of interleukin-12 (IL-12) production.
 IN Sun, Lijun; Demko, Zachary; Wada, Yumiko
 PA Synta Pharmaceuticals Corp., USA
 SO PCT Int. Appl., 81 pp.
 CODEN: PIXXD2
 DT Patent
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006007532	A2	20060119	WO 2005-US23346	20050701
	WO 2006007532	A3	20060817		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	AU 2005262322	A1	20060119	AU 2005-262322	20050701
	CA 2571178	A1	20060119	CA 2005-2571178	20050701
	US 2006063739	A1	20060323	US 2005-174173	20050701
	EP 1765325	A2	20070328	EP 2005-767834	20050701
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			
PRAI	US 2004-585124P	P	20040701		
	WO 2005-US23346	W	20050701		
OS	MARPAT 144:128998				
GI					



AB Title compds. [I; R1 = N:CRaRb, NRc(CH2)nRc, cycloalkyl, aryl, heteroaryl;
 R2, R4 = Rc, halo, NO2, cyano, isothionitro, SRc, ORc; R2R4 = CO; R3 = Rc,

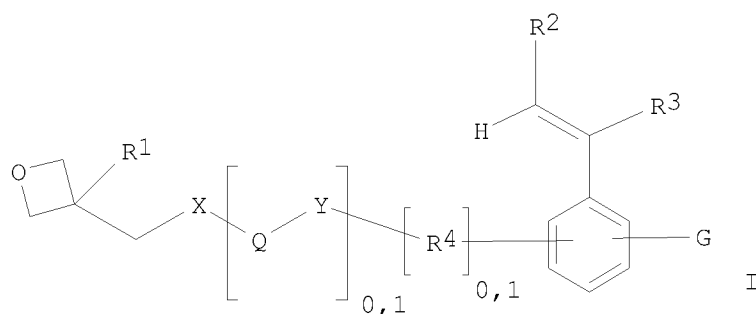
alkenyl, alkynyl, ORc, O₂CRC, SO₂Rc, SORc, SRc, CORc, CO₂Rc, etc.; R₅ = H, alkyl; G = hydrazide, hydrazone, hydrazine, hydroxylamine, oxime, carbamate, thiocarbamate, guanidine, cyanoguanidine, urea, sulfamide, phosphoryl, Si(OH)₂, CONRcCO, etc.; Y = bond, CH₂, CO, C:NRc, O, S, SO, SO₂, NRc, etc.; U, V = N, CRc; W = O, S, SO, SO₂, NRc, NCORc; Ra, Rb = H, alkyl, aryl, heteroaryl; Rc = H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, etc.; n = 0-6], were prepared Thus, 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propan-1-ol (preparation given) was stirred with m-trifluoromethylphenyl isocyanate in MeCN containing cat. 4-dimethylaminopyridine to give (3-trifluoromethylphenyl)carbamic acid 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propyl ester. The latter inhibited IL-12 production with an IC₅₀ of <25 nM.

=> d 2-4 bib abs

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:964865 CAPLUS
 DN 141:395968
 TI Oxetane compounds containing styrenic functionality
 IN Musa, Osama M.
 PA National Starch and Chemical Investment Holding Corporation, USA
 SO U.S. Pat. Appl. Publ., 5 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004225071	A1	20041111	US 2003-430086	20030506
	US 6953862	B2	20051011		
	WO 2004101541	A1	20041125	WO 2004-US12489	20040421
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CN 1697832	A	20051116	CN 2004-80000440	20040421
	EP 1620417	A1	20060201	EP 2004-760829	20040421
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	JP 2006516551	T	20060706	JP 2005-518201	20040421
	CN 1944418	A	20070411	CN 2006-10153771	20040421
	US 2005192446	A1	20050901	US 2005-120585	20050503
PRAI	US 2003-430086	A	20030506		
	CN 2004-80000440	A3	20040421		
	WO 2004-US12489	W	20040421		

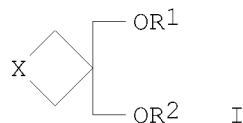
GI



AB The invention relates to compds. containing an oxetane functionality and a styrenic functionality having structure I; wherein R1 is a Me or Et group; R2 and R3 are H or a Me or Et group; R4 is a direct bond or a divalent hydrocarbon; X and Y are independently a direct bond or an ether, ester, amide, or carbamate group, provided both X and Y are not a direct bond; Q is a divalent hydrocarbon (which may contain heteroatoms of N, O, or S); and G is -OR1, -SR1, or -N(R2)(R3), in which R1, R2 and R3 are as described above.. The oxetane functionality is homopolymerizable in reactions that undergo cationic or anionic ring opening, and the styrenic is polymerizable with compds. such as electron acceptor compds. The dual functionality allows for dual cure processing. Thus, styrene carbamate Et oxetane was prepared from 3-ethyl-3-hydroxymethyl-oxetane and 3-isopropenyl- α,α -dimethyl-benzyl isocyanate (m-TMI).

RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

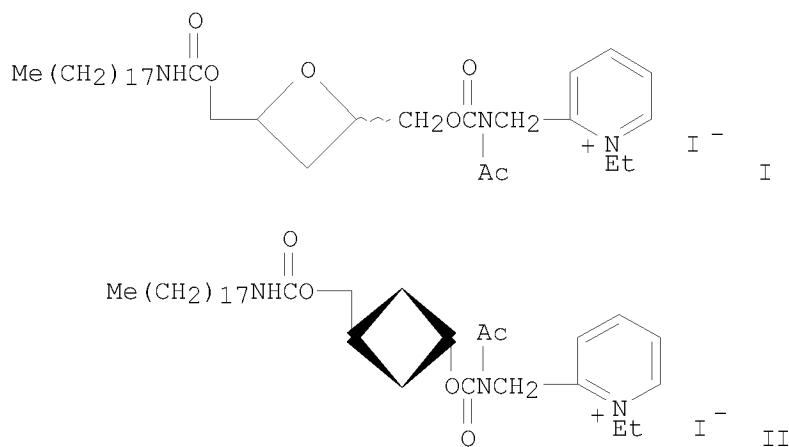
L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:22563 CAPLUS
DN 124:202752
TI Heterocyclic lipids with PAF antagonist activities 4. Synthesis of 3,3-bis(hydroxymethyl)-oxetane, -thietane and -azetidine, and 1,1-bis(hydroxymethyl)cycloalkane derivatives
AU Chung, Sung-Kee; Ban, Su Ho; Kim, Byung Eog; Woo, Soon Hyung
CS Dept. of Chemistry, Pohang Univ. of Science and Technology, Pohang, 790-784, S. Korea
SO Korean Journal of Medicinal Chemistry (1995), 5(2), 94-111
CODEN: KJMCE7; ISSN: 1225-0058
PB Korean Chemical Society
DT Journal
LA English
GI



AB Conformationally constrained analogs of platelet activating factor incorporating a lipophile and a pyridine-like heterocycle coupled to core

groups such as 3,3-bis(hydroxymethyl)oxetanes I [X = O, R1 = CONH(CH2)17Me, (CH2)15Me, CONH(CH2)15Me, R2 = H, CONHCH2-2-pyridinyl], -thietanes I [X = S, R1 = CONH(CH2)17Me, R2 = H, CONHCH2-2-pyridinyl], -azetidines I [X = NAc, R1 = CONH(CH2)17Me, CONH(CH2)15Me, R2 = H, CONHCH2-2-pyridinyl], and 1,1-bis(hydroxymethyl)cycloalkanes I [X = (CH2)n, n = 1-4, R1 = CONH(CH2)17Me, CONH(CH2)15Me, R2 = H, CONHCH2-2-pyridinyl] through hydrogen bond accepting linkages such as ether, ester and carbamate have been synthesized as potent PAF receptor antagonists.

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1996:22562 CAPLUS
 DN 124:202751
 TI Heterocyclic lipids with PAF antagonist activities 3. Synthesis of 2,4-bis(hydroxymethyl)-oxetane and 1,3-bis(hydroxymethyl)cyclobutane derivatives
 AU Chung, Sung-Kee; Ban, Su Ho; Woo, Soon Hyung
 CS Dep. of Chemistry, Pohang Univ. of Science and Technology, Pohang, 790-784, S. Korea
 SO Korean Journal of Medicinal Chemistry (1995), 5(2), 84-93
 CODEN: KJMCE7; ISSN: 1225-0058
 PB Korean Chemical Society
 DT Journal
 LA English
 GI



AB Conformationally constrained analogs of platelet activating factor incorporating a lipophile and a pyridine-like heterocycle linked to core groups such as 2,4-bis(hydroxymethyl)oxetane, e.g. I, and 1,3-bis(hydroxymethyl)cyclobutane, e.g. II, via hydrogen bond acceptors such as carbamate and ether have been synthesized as potent PAF receptor antagonists.

=>

=>

Executing the logoff script...

=> LOG H

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	110.35	110.56
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-24.96	-24.96

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:36:28 ON 27 APR 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptaul29rc

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 10:44:40 ON 27 APR 2007
FILE 'CAPLUS' ENTERED AT 10:44:40 ON 27 APR 2007
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	110.35	110.56
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-24.96	-24.96

=> d his

(FILE 'HOME' ENTERED AT 10:21:10 ON 27 APR 2007)

FILE 'CAPLUS' ENTERED AT 10:21:28 ON 27 APR 2007

L1 4682 S OXETANE
L2 11113 S ACRYLOYL
L3 28 S L1 AND L2
L4 26 S L1 AND CARBAMATE
L5 4 S L4 AND ISOCYANATE

=> d 15 1-4 bib abs

L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:54836 CAPLUS
DN 144:128998

TI Preparation of morpholinopyrimidines and related compounds as modulators of interleukin-12 (IL-12) production.

IN Sun, Lijun; Demko, Zachary; Wada, Yumiko

PA Synta Pharmaceuticals Corp., USA

SO PCT Int. Appl., 81 pp.

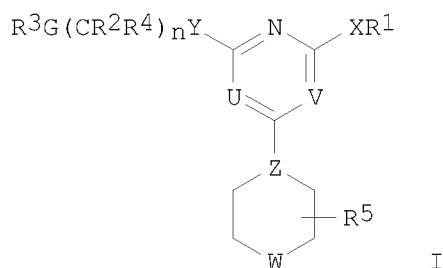
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006007532	A2	20060119	WO 2005-US23346	20050701
	WO 2006007532	A3	20060817		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	AU 2005262322	A1	20060119	AU 2005-262322	20050701
	CA 2571178	A1	20060119	CA 2005-2571178	20050701
	US 2006063739	A1	20060323	US 2005-174173	20050701
	EP 1765325	A2	20070328	EP 2005-767834	20050701
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			
PRAI	US 2004-585124P	P	20040701		
	WO 2005-US23346	W	20050701		
OS	MARPAT 144:128998				
GI					



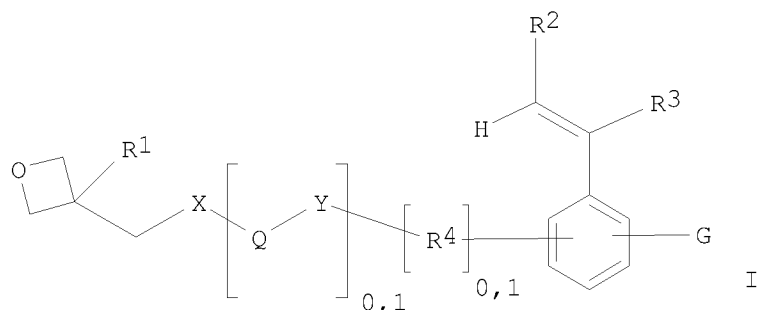
AB Title compds. [I; R1 = N:CRaRb, NRc(CH2)nRc, cycloalkyl, aryl, heteroaryl; R2, R4 = Rc, halo, NO2, cyano, isothionitro, SRc, ORc; R2R4 = CO; R3 = Rc, alkenyl, alkynyl, ORc, O2CRc, SO2Rc, SORc, SRc, CORc, CO2Rc, etc.; R5 = H, alkyl; G = hydrazide, hydrazone, hydrazine, hydroxylamine, oxime, carbamate, thiocarbamate, guanidine, cyanoguanidine, urea, sulfamide, phosphoryl, Si(OH)2, CONRcCO, etc.; Y = bond, CH2, CO, C:NRc, O, S, SO, SO2, NRc, etc.; U, V = N, CRc; W = O, S, SO, SO2, NRc, NCORc; Ra, Rb = H, alkyl, aryl, heteroaryl; Rc = H, alkyl, aryl, heteroaryl,

cyclyl, heterocyclyl, etc.; n = 0-6], were prepared Thus,
 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propan-1-ol (preparation given) was stirred with m-trifluoromethylphenyl isocyanate in MeCN containing cat. 4-dimethylaminopyridine to give (3-trifluoromethylphenyl)carbamic acid 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propyl ester. The latter inhibited IL-12 production with an IC50 of <25 nM.

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:964865 CAPLUS
 DN 141:395968
 TI Oxetane compounds containing styrenic functionality
 IN Musa, Osama M.
 PA National Starch and Chemical Investment Holding Corporation, USA
 SO U.S. Pat. Appl. Publ., 5 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004225071	A1	20041111	US 2003-430086	20030506
	US 6953862	B2	20051011		
	WO 2004101541	A1	20041125	WO 2004-US12489	20040421
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CN 1697832	A	20051116	CN 2004-80000440	20040421
	EP 1620417	A1	20060201	EP 2004-760829	20040421
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	JP 2006516551	T	20060706	JP 2005-518201	20040421
	CN 1944418	A	20070411	CN 2006-10153771	20040421
	US 2005192446	A1	20050901	US 2005-120585	20050503
PRAI	US 2003-430086	A	20030506		
	CN 2004-80000440	A3	20040421		
	WO 2004-US12489	W	20040421		

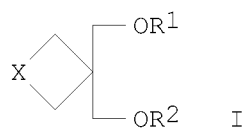
GI



AB The invention relates to compds. containing an oxetane functionality and a styrenic functionality having structure I; wherein R1 is a Me or Et group; R2 and R3 are H or a Me or Et group; R4 is a direct bond or a divalent hydrocarbon; X and Y are independently a direct bond or an ether, ester, amide, or carbamate group, provided both X and Y are not a direct bond; Q is a divalent hydrocarbon (which may contain heteroatoms of N, O, or S); and G is -OR1, -SR1, or -N(R2)(R3), in which R1, R2 and R3 are as described above.. The oxetane functionality is homopolymerizable in reactions that undergo cationic or anionic ring opening, and the styrenic is polymerizable with compds. such as electron acceptor compds. The dual functionality allows for dual cure processing. Thus, styrene carbamate Et oxetane was prepared from 3-ethyl-3-hydroxymethyl-oxetane and 3-isopropenyl- α,α -dimethyl-benzyl isocyanate (m-TMI).

RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

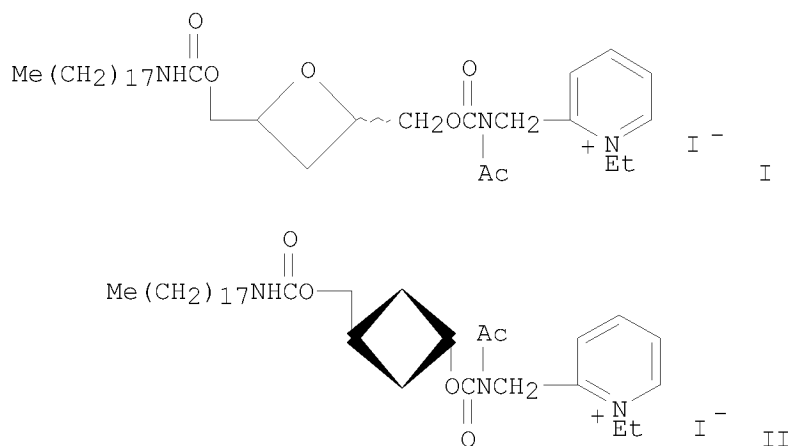
L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:22563 CAPLUS
DN 124:202752
TI Heterocyclic lipids with PAF antagonist activities 4. Synthesis of 3,3-bis(hydroxymethyl)-oxetane, -thietane and -azetidine, and 1,1-bis(hydroxymethyl)cycloalkane derivatives
AU Chung, Sung-Kee; Ban, Su Ho; Kim, Byung Eog; Woo, Soon Hyung
CS Dept. of Chemistry, Pohang Univ. of Science and Technology, Pohang, 790-784, S. Korea
SO Korean Journal of Medicinal Chemistry (1995), 5(2), 94-111
CODEN: KJMCE7; ISSN: 1225-0058
PB Korean Chemical Society
DT Journal
LA English
GI



AB Conformationally constrained analogs of platelet activating factor

incorporating a lipophile and a pyridine-like heterocycle coupled to core groups such as 3,3-bis(hydroxymethyl)oxetanes I [X = O, R1 = CONH(CH₂)₁₇Me, (CH₂)₁₅Me, CONH(CH₂)₁₅Me, R2 = H, CONHCH₂-2-pyridinyl], -thietanes I [X = S, R1 = CONH(CH₂)₁₇Me, R2 = H, CONHCH₂-2-pyridinyl], -azetidines I [X = NAc, R1 = CONH(CH₂)₁₇Me, CONH(CH₂)₁₅Me, R2 = H, CONHCH₂-2-pyridinyl], and 1,1-bis(hydroxymethyl)cycloalkanes I [X = (CH₂)_n, n = 1-4, R1 = CONH(CH₂)₁₇Me, CONH(CH₂)₁₅Me, R2 = H, CONHCH₂-2-pyridinyl] through hydrogen bond accepting linkages such as ether, ester and carbamate have been synthesized as potent PAF receptor antagonists.

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1996:22562 CAPLUS
 DN 124:202751
 TI Heterocyclic lipids with PAF antagonist activities 3. Synthesis of 2,4-bis(hydroxymethyl)-oxetane and 1,3-bis(hydroxymethyl)cyclobutane derivatives
 AU Chung, Sung-Kee; Ban, Su Ho; Woo, Soon Hyung
 CS Dep. of Chemistry, Pohang Univ. of Science and Technology, Pohang, 790-784, S. Korea
 SO Korean Journal of Medicinal Chemistry (1995), 5(2), 84-93
 CODEN: KJMCE7; ISSN: 1225-0058
 PB Korean Chemical Society
 DT Journal
 LA English
 GI



AB Conformationally constrained analogs of platelet activating factor incorporating a lipophile and a pyridine-like heterocycle linked to core groups such as 2,4-bis(hydroxymethyl)oxetane, e.g. I, and 1,3-bis(hydroxymethyl)cyclobutane, e.g. II, via hydrogen bond acceptors such as carbamate and ether have been synthesized as potent PAF receptor antagonists.

=> d 131:200264

ANSWER 1 CAPLUS COPYRIGHT 2007 ACS on STN

AN 131:200264 CAPLUS

TI Polyfunctional oxetane compounds as monomers and their manufacture

IN Kashima, Mikihiro; Machida, Toshikazu

PA Ube Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 11246541	A	19990914	JP 1998-55172	19980306
PRAI	JP 1998-55172		19980306		
OS	MARPAT 131:200264				

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

125.67

125.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-28.08

-28.08

FILE 'STNGUIDE' ENTERED AT 10:48:08 ON 27 APR 2007

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE

AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

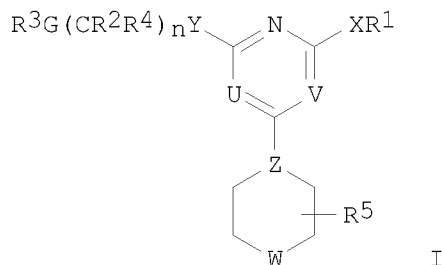
LAST RELOADED: Apr 20, 2007 (20070420/UP).

=> d abs

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

GI



AB Title compds. [I; R1 = N:CRaRb, NRc(CH2)nRc, cycloalkyl, aryl, heteroaryl; R2, R4 = Rc, halo, NO2, cyano, isothionitro, SRc, ORc; R2R4 = CO; R3 = Rc, alkenyl, alkynyl, ORc, O2CRc, SO2Rc, SORc, SRc, CORc, CO2Rc, etc.; R5 = H, alkyl; G = hydrazide, hydrazone, hydrazine, hydroxylamine, oxime, carbamate, thiocarbamate, guanidine, cyanoguanidine, urea, sulfamide, phosphoryl, Si(OH)2, CONRcCO, etc.; Y = bond, CH2, CO, C:NRc, O, S, SO, SO2, NRc, etc.; U, V = N, CRc; W = O, S, SO, SO2, NRc, NCORc; Ra, Rb = H, alkyl, aryl, heteroaryl; Rc = H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, etc.; n = 0-6], were prepared Thus, 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propan-1-ol (preparation given) was stirred with m-trifluoromethylphenyl isocyanate in MeCN containing cat. 4-dimethylaminopyridine to give (3-trifluoromethylphenyl)carbamic acid 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propyl ester. The latter inhibited IL-12 production with an IC50 of <25 nM.

=> d 14 1-26 bib abs

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

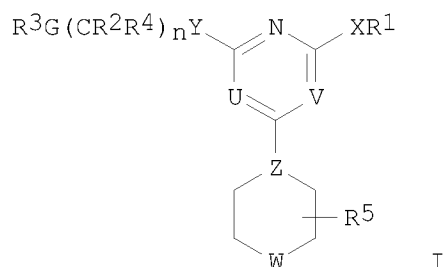
L4 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:97246 CAPLUS
 DN 144:151546
 TI Compositions containing oxetane compounds for use in semiconductor packaging
 IN Musa, Osama M.
 PA National Starch and Chemical Investment Holding Corporation, USA
 SO Eur. Pat. Appl., 7 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1621534	A2	20060201	EP 2005-16295	20050727
	EP 1621534	A3	20070124		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 2006025542	A1	20060202	US 2004-901631	20040729
	JP 2006037107	A	20060209	JP 2005-219085	20050728
	KR 2006048870	A	20060518	KR 2005-68962	20050728
	CN 1743373	A	20060308	CN 2005-10109831	20050729
PRAI	US 2004-901631	A	20040729		

AB Compns. containing oxetane compds. having ester, amide, urea, carbamate, carbonate, or carbonyl functionality one C atom removed from the oxetane ring cure at high temps., and are suitable for use as underfill materials within a semiconductor package, particularly in applications using lead-free solder elec. interconnections. Thus, m-tetramethylxylene diisocyanate (24.43 g, 0.1 mol) under N was mixed with 2 drops of Bu2Sn dilaurate catalyst heated to 60°, 3-ethyl-3-(hydroxymethyl)oxetane (23.20 g, 0.2 mol) was added over 20 min., then heated 4 h to give (after workup) a diurethane having m.p. 71°.

L4 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:54836 CAPLUS
 DN 144:128998
 TI Preparation of morpholinopyrimidines and related compounds as modulators
 of interleukin-12 (IL-12) production.
 IN Sun, Lijun; Demko, Zachary; Wada, Yumiko
 PA Synta Pharmaceuticals Corp., USA
 SO PCT Int. Appl., 81 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006007532	A2	20060119	WO 2005-US23346	20050701
	WO 2006007532	A3	20060817		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	AU 2005262322	A1	20060119	AU 2005-262322	20050701
	CA 2571178	A1	20060119	CA 2005-2571178	20050701
	US 2006063739	A1	20060323	US 2005-174173	20050701
	EP 1765325	A2	20070328	EP 2005-767834	20050701
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			
PRAI	US 2004-585124P	P	20040701		
	WO 2005-US23346	W	20050701		
OS	MARPAT 144:128998				
GI					



AB Title compds. [I; R1 = N:CRaRb, NRc(CH2)nRc, cycloalkyl, aryl, heteroaryl; R2, R4 = Rc, halo, NO2, cyano, isothionitro, SRc, ORc; R2R4 = CO; R3 = Rc, alkenyl, alkynyl, ORc, O2CRc, SO2Rc, SORc, SRc, CORc, CO2Rc, etc.; R5 = H, alkyl; G = hydrazide, hydrazone, hydrazine, hydroxylamine, oxime, carbamate, thiocarbamate, guanidine, cyanoguanidine, urea,

sulfamide, phosphoryl, Si(OH)₂, CONRcCO, etc.; Y = bond, CH₂, CO, C:NRc, O, S, SO, SO₂, NRc, etc.; U, V = N, CRc; W = O, S, SO, SO₂, NRc, NCORc; Ra, Rb = H, alkyl, aryl, heteroaryl; Rc = H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, etc.; n = 0-6], were prepared Thus, 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propan-1-ol (preparation given) was stirred with m-trifluoromethylphenyl isocyanate in MeCN containing cat. 4-dimethylaminopyridine to give (3-trifluoromethylphenyl)carbamic acid 3-[4-[N'-(3-methylbenzylidene)hydrazino]-6-morpholin-4-ylpyrimidin-2-yl]propyl ester. The latter inhibited IL-12 production with an IC₅₀ of <25 nM.

L4 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:120921 CAPLUS

DN 142:219150

TI A preparation of 3-aminochroman and 2-aminotetralin derivatives, useful in the treatment of serotonin-mediated disorders

IN Hatzenbuehler, Nicole Theriault; Evrard, Deborah Ann; Mewshaw, Richard Eric; Zhou, Dahui; Shah, Uresh Shantilal; Inghrim, Jennifer Ann; Lenicek, Steven Edward; Baudy, Reinhardt Bernhard; Butera, John Anthony; Sabb, Annmarie L.; Failli, Amedeo Arturo; Ramamoorthy, Pudukkaraipudur Sivaramakrishnan

PA Wyeth, John, and Brother Ltd., USA

SO PCT Int. Appl., 233 pp.

CODEN: PIXXD2

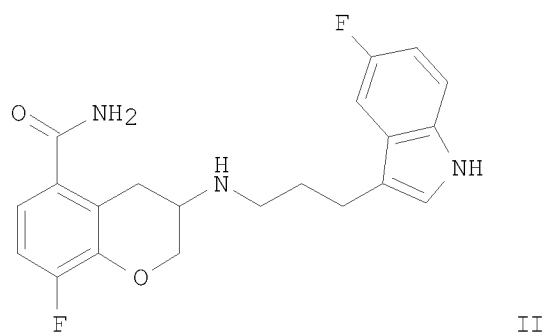
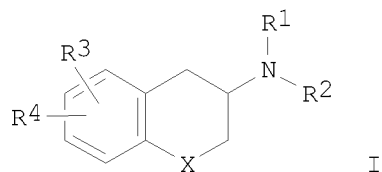
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005012291	A1	20050210	WO 2004-US24549	20040729
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2005032873	A1	20050210	US 2004-898866	20040726
	AU 2004261649	A1	20050210	AU 2004-261649	20040729
	CA 2533363	A1	20050210	CA 2004-2533363	20040729
	EP 1651637	A1	20060503	EP 2004-779563	20040729
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	BR 2004013022	A	20061003	BR 2004-13022	20040729
	CN 1860112	A	20061108	CN 2004-80028069	20040729
	JP 2007500718	T	20070118	JP 2006-522076	20040729
	NO 2006000402	A	20060406	NO 2006-402	20060125
	IN 2006KN00387	A	20070209	IN 2006-KN387	20060221
PRAI	US 2003-491137P	P	20030730		
	US 2003-491794P	P	20030801		
	US 2004-898866	A	20040726		
	WO 2004-US24549	W	20040729		
OS	MARPAT 142:219150				

GI



AB The invention relates to a preparation of 3-aminochroman and 2-aminotetralin derivs. of formula I [wherein: X is O or CH₂; R₁ is H, (cyclo)alkyl, or oxetane, etc.; R₂ is (CH₂)₂₋₄-R₅; R₃ is OMe, C(O)(alkyl), or heterocycle, etc.; R₄ is H or halogen; R₅ is derivative of indole, benzothiophene, or benzofuran, etc.], useful in the treatment of serotonin-mediated disorders. The invention compds. are useful for the treatment of serotonin-mediated disorders such as depression and anxiety. For instance, (indolylpropylamino)chroman derivative II (5-HT transporter affinity: K_i = 7 nM, 5-HT_{1A} function cAMP: EC₅₀ = 228.5 nM) was prepared via N-alkylation of 3-amino-8-fluorochroman-5-carboxamide by 3-(3-bromopropyl)-5-fluoro-1H-indole with a yield of 60%.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:1068395 CAPLUS
DN 142:155739
TI Dimethylzinc-initiated radical reaction of cyclic ethers with arylamines, alkoxyamines, and dialkylhydrazines
AU Yamamoto, Yasutomo; Maekawa, Masaru; Akindele, Tito; Yamada, Ken-Ichi; Tomioka, Kiyoshi
CS Graduate School of Pharmaceutical Sciences, Kyoto University, Yoshida, Sakyo-ku, Kyoto, 606-8501, Japan
SO Tetrahedron (2005), 61(2), 379-384
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier B.V.
DT Journal
LA English
OS CASREACT 142:155739
AB Dimethylzinc-initiated radical reaction of THF with arylamines afforded

amino alcs. which were derived from the two mols. of THF and one mol. of an arylamine. The reaction seems to proceed via two-consecutive processes, electrophilic and then nucleophilic reactions of THF-derived species. Alkoxyamines and dialkylhydrazines reacted with electrophilic cyclic ether species to give the corresponding oximes and hydrazones of ω -hydroxyalkanal.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:1016091 CAPLUS
DN 142:7627
TI Curable compositions containing hybrid oxetane compounds having electron acceptor or electron donor functionality
IN Musa, Osama M.
PA National Starch and Chemical Investment Holding Corporation, USA
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

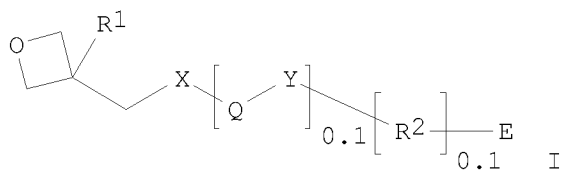
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004101646	A1	20041125	WO 2004-US12394	20040421
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW</p> <p>RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				
EP 1620488	A1	20060201	EP 2004-760827	20040421
<p>R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK</p>				
CN 1784450	A	20060607	CN 2004-80012025	20040421
PRAI US 2003-430098	A	20030506		
WO 2004-US12394	W	20040421		
<p>AB The composition comprises a compound containing an oxetane functionality and an electron acceptor or an electron donor functionality, a curing agent and a filler. The oxetane compds. are useful as epoxy substitutes in compns. for adhesives, coatings or encapsulants. Thus, an adhesive composition comprising Et oxetane methacrylate 20.0, Ricon 131/MA10 4.0 poly(butadiene) 4.0, SR 248 (dimethacrylate) 10.0, SR 355 (tetramethacrylate) 5.0, styrene carbamate Et oxetane (prepared from 3-ethyl-3-oxetane methanol and m-TMI) 3.0, Perkadox 16 (peroxide) 0.5, ZCN (imidazole) 0.1, Fluowet OTN (surfactant) 0.2, silane adhesion promoter 0.3 and silica filler 56.9 parts showing good curability and adhesion.</p>				

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:964868 CAPLUS

DN 141:412014
 TI Adhesive and curable compositions containing hybrid oxetane compounds
 IN Musa, Osama M.
 PA USA
 SO U.S. Pat. Appl. Publ., 7 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004225074	A1	20041111	US 2003-430089	20030506
	US 7034064	B2	20060425		
PRAI	US 2003-430089		20030506		
GI					



AB Compns. for use as adhesives, coatings or encapsulants contain an oxetane functionality and an electron acceptor or an electron donor functionality, and can be represented by I in which R1 = Me or Et; R2 is a divalent hydrocarbon; X and Y = direct bond, or an ether, ester, or carbamate functionality; Q is a divalent hydrocarbon, and E is an electron donor or electron acceptor functionality. Cinnamyl Et Oxetane was prepared from 3-ethyl-3-oxetane methanol and cinnamyl chloride. Similarly, maleimide oxetane derivs. were prepared and proved useful as epoxy substitutes in radically curable adhesive formulations.

RE.CNT 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

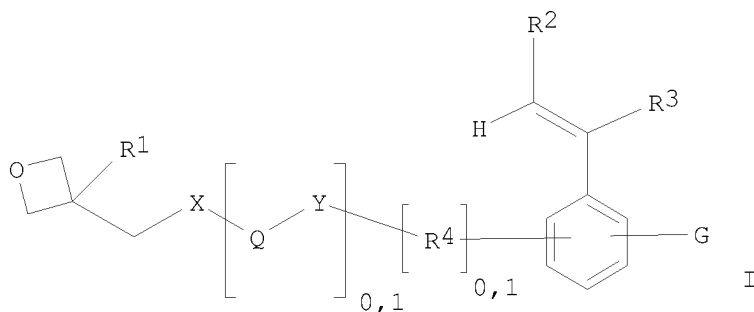
L4 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:964865 CAPLUS
 DN 141:395968
 TI Oxetane compounds containing styrenic functionality
 IN Musa, Osama M.
 PA National Starch and Chemical Investment Holding Corporation, USA
 SO U.S. Pat. Appl. Publ., 5 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004225071	A1	20041111	US 2003-430086	20030506
	US 6953862	B2	20051011		
	WO 2004101541	A1	20041125	WO 2004-US12489	20040421
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CN 1697832 A 20051116 CN 2004-80000440 20040421
 EP 1620417 A1 20060201 EP 2004-760829 20040421
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
 JP 2006516551 T 20060706 JP 2005-518201 20040421
 CN 1944418 A 20070411 CN 2006-10153771 20040421
 US 2005192446 A1 20050901 US 2005-120585 20050503
 PRAI US 2003-430086 A 20030506
 CN 2004-80000440 A3 20040421
 WO 2004-US12489 W 20040421

GI



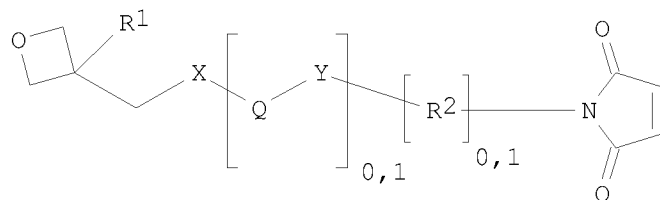
AB The invention relates to compds. containing an oxetane functionality and a styrenic functionality having structure I; wherein R1 is a Me or Et group; R2 and R3 are H or a Me or Et group; R4 is a direct bond or a divalent hydrocarbon; X and Y are independently a direct bond or an ether, ester, amide, or carbamate group, provided both X and Y are not a direct bond; Q is a divalent hydrocarbon (which may contain heteroatoms of N, O, or S); and G is -OR1, -SR1, or -N(R2)(R3), in which R1, R2 and R3 are as described above.. The oxetane functionality is homopolymerizable in reactions that undergo cationic or anionic ring opening, and the styrenic is polymerizable with compds. such as electron acceptor compds. The dual functionality allows for dual cure processing. Thus, styrene carbamate Et oxetane was prepared from 3-ethyl-3-hydroxymethyl-oxetane and 3-isopropenyl- α,α -dimethyl-benzyl isocyanate (m-TMI).

RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:964864 CAPLUS
 DN 141:395967
 TI Oxetane compounds containing maleimide functionality
 IN Musa, Osama M.
 PA National Starch and Chemical Investment Holding Corporation, USA
 SO U.S. Pat. Appl. Publ., 5 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004225070	A1	20041111	US 2003-430085	20030506
	US 6982338	B2	20060103		
	WO 2004101550	A1	20041125	WO 2004-US12385	20040421
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1620430	A1	20060201	EP 2004-760825	20040421
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	CN 1791597	A	20060621	CN 2004-80012026	20040421
	EP 1736473	A2	20061227	EP 2006-19766	20040421
	EP 1736473	A3	20070131		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	JP 2007502859	T	20070215	JP 2006-532450	20040421
	US 2005209437	A1	20050922	US 2005-121430	20050504
PRAI	US 2003-430085	A	20030506		
	EP 2004-760825	A3	20040421		
	WO 2004-US12385	W	20040421		
OS	MARPAT 141:395967				
GI					



AB The invention relates to compds. containing an oxetane functionality and a maleimide functionality having structure I; wherein R1 is a Me or Et group, R2 is a divalent hydrocarbon, X and Y independently are a direct bond, or an ether, ester, amide, or carbamate functionality, and

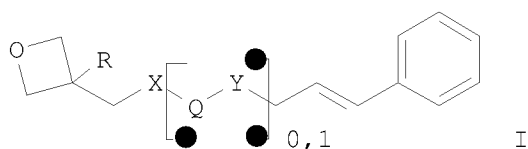
Q is a divalent organic group, and provided that X and Y will not both be direct bonds.. The oxetane functionality is homopolymerizable in reactions that undergo cationic or anionic ring opening, and the maleimide functionality is homopolymerizable, or polymerizable with compds. such as electron donor compds. The dual functionality allows for dual cure processing. Thus, Et oxetane maleimide was prepared from 6-maleimidocaproic acid and 3-ethyl-3-oxetane methanol in the presence of 4-dimethylaminopyridine and 1,3-dicyclohexylcarbodiimide.

RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:508879 CAPLUS
DN 141:54788
TI Oxetane compounds containing cinnamyl functionality
IN Musa, Osama M.
PA National Starch and Chemical Investment Holding Corporation, USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6753434	B1	20040622	US 2003-430114	20030506
	US 2004225081	A1	20041111	US 2004-752408	20040106
	US 6943258	B2	20050913		
	WO 2004101542	A1	20041125	WO 2004-US12490	20040421
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1620418	A1	20060201	EP 2004-760830	20040421
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	CN 1791589	A	20060621	CN 2004-80012027	20040421
	JP 2007500742	T	20070118	JP 2006-532454	20040421
PRAI	US 2003-430114	A3	20030506		
	WO 2004-US12490	W	20040421		

GI



AB These compds. contain an oxetane functionality and a cinnamyl functionality. The oxetane functionality is homopolymerizable in reactions that can undergo cationic or anionic ring opening, and the cinnamyl functionality is polymerizable with compds. such as electron acceptor compds. The dual functionality allows for dual cure processing. The generic structure of such compds. is I, in which R is a Me or Et group, X and Y independently are a direct bond, or an ether, ester, or carbamate group, and Q is a divalent hydrocarbon (which may contain heteroatoms of N, O, or S), provided that X and Y will not both be direct bonds in the same mol. Cinnamyl Et Oxetane was prepared from 3-ethyl-3-oxetane methanol and cinnamyl chloride.

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:97511 CAPLUS

DN 140:147287

TI Carbamic acid esters, base generators as curing agents, compositions reactive to bases, and applications of the compositions and their cured products

IN Utsu, Hiromi; Toriumi, Suguru; Miki, Yasuaki

PA Mitsubishi Chemical Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

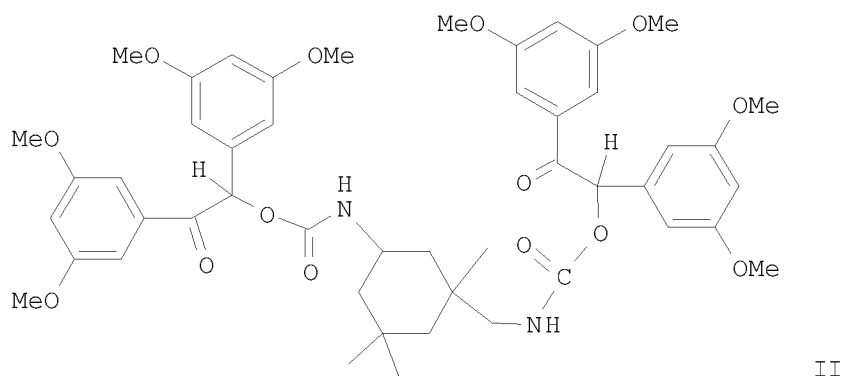
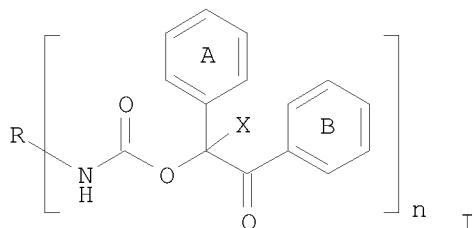
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2004035413	A	20040205	JP 2002-190103	20020628
PRAI	JP 2002-190103		20020628		
OS	MARPAT 140:147287				
GI					



AB The esters are I (R = n-valent organic group; n = 2-10; X = H, C1-10 hydrocarbyl, C1-10 alkoxy, halo; A and B may contain substituents). The compns., showing good curability, are useful for sealants and adhesives, and the cured products are useful for optical materials and laminates. Thus, a composition comprising 4,4'-bis(2-hydroxythio)diphenylsulfone dithioglycidyl ether and II was applied on a PET film and cured by UV irradiation to give a transparent layer.

L4 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:928777 CAPLUS

DN 140:128262

TI Synthesis of spiro[pyrrolidine or piperidine-3,9'-xanthenes] by anionic cycloacylation of carbamates

AU Quintas, Domingo; Garcia, Alberto; Dominguez, Domingo

CS Facultad de Quimica, Departamento de Quimica Organica y Unidad Asociada al CSIC, Universidad de Santiago de Compostela, Santiago de Compostela, 15782, Spain

SO Tetrahedron Letters (2003), 44(52), 9291-9294

CODEN: TELEAY; ISSN: 0040-4039

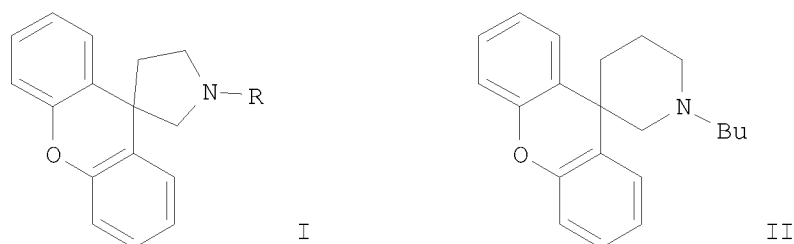
PB Elsevier Science B.V.

DT Journal

LA English

OS CASREACT 140:128262

GI



AB Xanthene spiropyrrolidines I (R = H, Ph(CH₂)₂, Bn, Bu) and spiropiperidine II were synthesized by a process in which the key step was intramol. trapping of a xanthen-9-yl anion by a carbamate side-chain situated at the same position.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:490431 CAPLUS

DN 135:256805

TI The Paterno-Buechi reaction of α -alkyl-substituted ene carbamates and benzaldehyde

AU Bach, Thorsten; Schroder, Jurgen

CS Technische Universitat Munchen, Lehrstuhl fur Organische Chemie I, Garching, 85747, Germany

SO Synthesis (2001), (8), 1117-1124

CODEN: SYNTBF; ISSN: 0039-7881

PB Georg Thieme Verlag

DT Journal

LA English

OS CASREACT 135:256805

AB α -Substituted ene carbamates and enamides were prepared in two steps from the corresponding ketone, N-benzylamine and an appropriate acylating agent (Boc₂O, Ac₂O). The [2+2] photocycloaddn. reactions of benzaldehyde to alkenes which bear a primary or secondary alkyl substituent proceeded smoothly and gave 3-aminooxetanes in moderate to good yields (46-71%). An α -phenyl-substituted ene carbamate did not produce a photocycloaddn. product presumably due to rapid energy transfer (triplet sensitization) from the photoexcited aldehyde. For less obvious reasons a tert-butyl-substituted enamide did not react in the Paterno-Buechi reaction either. 3-Alkyl-3-aminooxetanes were obtained as a mixture of cis- and trans-diastereoisomers. An increase in the steric bulk of the alkyl substituent R shifted the diastereomeric ratio (cis-8/trans-8) in the direction of the thermodynamically more stable cis-product (29:71 for R = CH₃ up to 57:43 for R = cyclohexyl). Cis- and trans-oxetane diastereoisomers underwent a smooth ring opening/cyclization reaction upon treatment with trifluoroacetic acid. A trans-oxetane yielded oxazolidinones, and cis-oxetane gave exclusively a cis-oxazolidinone (54%). An was converted into a mixture of cis-(3-methyl-2-phenyl-3-oxetanyl) (phenylmethyl)carbamic acid 1,1-dimethylethyl ester (I) and trans-(3-methyl-2-phenyl-3-oxetanyl) (phenylmethyl)carbamic acid 1,1-dimethylethyl ester (II). Thus, trans-II was converted into trans-4-(hydroxymethyl)-4-methyl-5-phenyl-3-(phenylmethyl)-2-oxazolidinone. And cis-I was converted into

cis-4-(Hydroxymethyl)-4-methyl-5-phenyl-3-(phenylmethyl)-2-oxazolidinone.

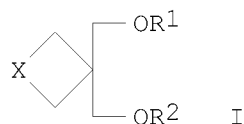
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:494216 CAPLUS
DN 131:242969
TI Formation of 3-hydroxyalkyl carbamates from carbon dioxide, amines and oxetanes
AU Ishii, Shigeru; Zhou, Ming; Yoshida, Yasuhiko; Noguchi, Hiromichi
CS Department of Applied Chemistry, Faculty of Engineering, Toyo University, Saitama, 350-8585, Japan
SO Synthetic Communications (1999), 29(18), 3207-3214
CODEN: SYNCAV; ISSN: 0039-7911
PB Marcel Dekker, Inc.
DT Journal
LA English
AB The reactions of carbon dioxide, primary or secondary aliphatic amines, and oxetanes at a CO₂ pressure of 40 atm at 100-120°C without any catalysts afforded new monocarbamates of 1,3-propanediols, with concomitant formation of amino alcs. from oxetanes and amines.
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1997:522193 CAPLUS
DN 127:207718
TI Molecular mechanics versus volume additivity methods in prediction of energetic materials density. Comparative analysis, and improvements for solids and liquids
AU Piacenza, G.; Jacob, G.; Graindorge, H.; Blaive, B.; Gallo, R.
CS ENSSPICAM, Fac. Sciences Saint-Jerome, Marseille, F-13397, Fr.
SO International Annual Conference of ICT (1997), 28th(Combustion and Detonation), 123.1-123.14
CODEN: IACIEQ; ISSN: 0722-4087
PB Fraunhofer-Institut fuer Chemische Technologie
DT Journal
LA English
AB A new method based on estns. of the mol. volume by Mol. Mechanics was used to approx. directly the d. of 142 solid and liquid energetic materials. Correlation analyses allowed to calculate the d. of these compds. with a mean error of 2.87%. The results showed a linear change with d. of the intermol. free space between the mols. The d. of the same energetic compds. was calculated by the commonly used volume additivity methods, and the estimated densities showed the same behavior as observed with Mol. Mechanics which appeared to be general and related to the structure of the solid and liquid materials. The results allowed to extend and improve the calcns. of the d. of these materials by the present available empirical procedures and to make a critical evaluation of their scope and limitations.

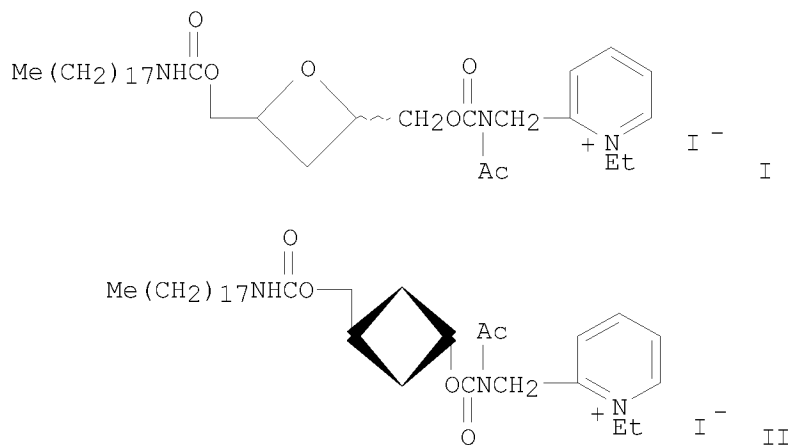
L4 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:22563 CAPLUS
DN 124:202752
TI Heterocyclic lipids with PAF antagonist activities 4. Synthesis of 3,3-bis(hydroxymethyl)-oxetane, -thietane and -azetidine, and 1,1-bis(hydroxymethyl)cycloalkane derivatives
AU Chung, Sung-Kee; Ban, Su Ho; Kim, Byung Eog; Woo, Soon Hyung

CS Dept. of Chemistry, Pohang Univ. of Science and Technology, Pohang,
790-784, S. Korea
SO Korean Journal of Medicinal Chemistry (1995), 5(2), 94-111
CODEN: KJMCE7; ISSN: 1225-0058
PB Korean Chemical Society
DT Journal
LA English
GI



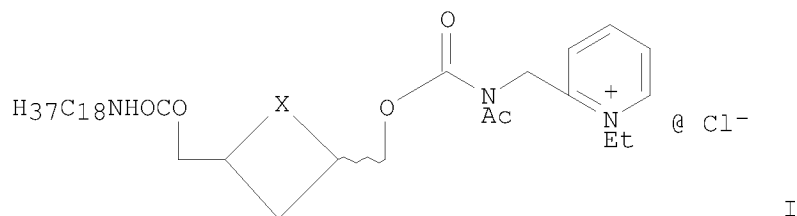
AB Conformationally constrained analogs of platelet activating factor incorporating a lipophile and a pyridine-like heterocycle coupled to core groups such as 3,3-bis(hydroxymethyl)oxetanes I [X = O, R1 = CONH(CH2)17Me, (CH2)15Me, CONH(CH2)15Me, R2 = H, CONHCH2-2-pyridinyl], -thietanes I [X = S, R1 = CONH(CH2)17Me, R2 = H, CONHCH2-2-pyridinyl], -azetidines I [X = NAc, R1 = CONH(CH2)17Me, CONH(CH2)15Me, R2 = H, CONHCH2-2-pyridinyl], and 1,1-bis(hydroxymethyl)cycloalkanes I [X = (CH2)n, n = 1-4, R1 = CONH(CH2)17Me, CONH(CH2)15Me, R2 = H, CONHCH2-2-pyridinyl] through hydrogen bond accepting linkages such as ether, ester and carbamate have been synthesized as potent PAF receptor antagonists.

L4 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:22562 CAPLUS
DN 124:202751
TI Heterocyclic lipids with PAF antagonist activities 3. Synthesis of 2,4-bis(hydroxymethyl)-oxetane and 1,3-bis(hydroxymethyl)cyclobutane derivatives
AU Chung, Sung-Kee; Ban, Su Ho; Woo, Soon Hyung
CS Dep. of Chemistry, Pohang Univ. of Science and Technology, Pohang, 790-784, S. Korea
SO Korean Journal of Medicinal Chemistry (1995), 5(2), 84-93
CODEN: KJMCE7; ISSN: 1225-0058
PB Korean Chemical Society
DT Journal
LA English
GI



AB Conformationally constrained analogs of platelet activating factor incorporating a lipophile and a pyridine-like heterocycle linked to core groups such as 2,4-bis(hydroxymethyl)oxetane, e.g. I, and 1,3-bis(hydroxymethyl)cyclobutane, e.g. II, via hydrogen bond acceptors such as carbamate and ether have been synthesized as potent PAF receptor antagonists.

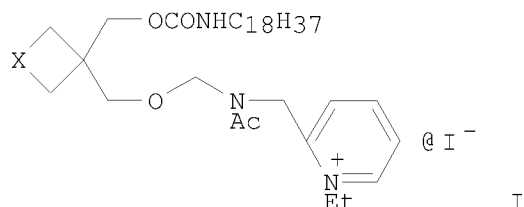
L4 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:598395 CAPLUS
 DN 123:314308
 TI Synthesis and bioactivities of heterocyclic lipids as PAF antagonists. 2
 AU Chung, S. K.; Ban, S. H.; Kim, S. H.; Kim, B. E.; Woo, S. H.
 CS Dep. Chemistry, Pohang Univ. Science Technology, Pohang, 790-784, S. Korea
 SO Bioorganic & Medicinal Chemistry Letters (1995), 5(10), 1097-102
 CODEN: BMCLE8; ISSN: 0960-894X
 PB Elsevier
 DT Journal
 LA English
 GI



AB Conformationally constrained analogs of platelet activating factor (PAF) incorporating a lipophile and a pyridine-like heterocycle linked to core groups such as 1,1-bis(hydroxymethyl)cyclobutane and 2,4-bis(hydroxymethyl)-oxetane, -thietane and -azetidine skeletons, e.g. I (X = O, S, NAc, NBz), via hydrogen bond acceptors such as ether

and/or carbamate have been synthesized, and their in vitro and in vivo bioactivities have indicated potent and selective PAF antagonism.

L4 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:598394 CAPLUS
 DN 123:313592
 TI Synthesis and bio-activities of heterocyclic lipids as PAF antagonists.
 AU Chung, S. K.; Ban, S. H.; Kim, S. H.; Kim, B. E.; Woo, S. H.
 CS Dep. Chemistry, Pohang Univ. Science Technol., Pohang, 790-784, S. Korea
 SO Bioorganic & Medicinal Chemistry Letters (1995), 5(10), 1091-6
 CODEN: BMCLE8; ISSN: 0960-894X
 PB Elsevier
 DT Journal
 LA English
 GI



AB Conformationally constrained analogs of platelet activating factor (PAF) incorporating various combinations of a lipophile and a pyridine-like heterocycle via hydrogen bond acceptors such as ether and/or carbamate linked to a suitable core group such as 1,1-bis(hydroxymethyl)cycloalkane and 3,3-bis(hydroxymethyl)-oxetane, -thietane and -azetidene skeletons, e.g. I (X = O, NAc, CH₂), have been synthesized, and are shown to be powerful and selective PAF receptor antagonists.

L4 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1989:153743 CAPLUS
 DN 110:153743
 TI Biscarbamoyl diselenide as a carbamoylating reagent. A convenient method for the preparation of ω-haloalkyl carbamates from cyclic ethers
 AU Fujiwara, Shinichi; Ogawa, Akiya; Kambe, Nobuaki; Ryu, Ilhyong; Sonoda, Noboru
 CS Fac. Eng., Osaka Univ., Suita, 565, Japan
 SO Chemistry Letters (1988), (10), 1805-6
 CODEN: CMLTAG; ISSN: 0366-7022
 DT Journal
 LA English
 OS CASREACT 110:153743
 AB Treatment of 4- to 7-membered cyclic ethers with Et₂NCOSeSeCONEt₂ and HgBr₂ or HgCl₂ resulted in carbamoylation-ring opening to give the corresponding ω-haloalkyl carbamates in moderate to high yields. E.g., tetrahydropyran with HgBr₂ gave 44% Et₂NCO(CH₂)₅Br and oxetane with HgBr₂ gave 85% Et₂NCO(CH₂)₃Br.

L4 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1967:500843 CAPLUS

DN 67:100843
 TI Vulcanizable rubbery oxetane-epoxide copolymers
 IN Vandenberg, Edwin J.
 PA Hercules Inc.
 SO U.S., 8 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3341475		19670912	US 1962-220025	19620828
AB	Continuation-in-part of U.S. 3,205,183 (see Brit. 980,093, CA 62: 7887h). The title copolymers are prepared and are useful for their low temperature flexibility, solvent resistance, stability to heat, light, and ozone, and low heat buildup. Thus, under N, a mixture of toluene 73, epichlorohydrin (I) 10, and trimethylene oxide (II) 10 parts was heated to 65°C. and treated with a catalyst prepared by adding 7.2 parts Et2O to 0.92 part Et3Al in 3.2 parts heptane, cooling the mixture to 0°C., adding 0.072 part water during 30 min., adding 0.4 part acetylacetone during 30 min., and stirring the mixture for 1 hr. at 0°C. and 2 hrs. at 25°C. After 7.5 hrs. at 65°C., the polymerization was stopped with 8 parts EtOH, the reaction mixture was diluted with 4 vols. ether, and an ether-insol. copolymer was collected, washed twice with ether and once with EtOH containing 1% HCl, washed with MeOH until neutral, washed with MeOH containing 0.2% 4,4'-thiobis(6-tert-butyl-m-cresol) (III), and dried in vacuo for 16 hrs. at 80°C. to give a 6% yield of white rubbery copolymer, having reduced sp. viscosity 3.9 (0.1% in α -chloronaphthalene at 100°C.) and containing 88% I. The ether-diluted polymerization mixture, after separation of the ether-insol. copolymer, was combined with the ether washes from work-up of the ether-insol. copolymer, stirred with 3% aqueous HCl for 1 hr., with water until neutral, with 2% aqueous NaHCO3, and with water until neutral. The mixture was concentrated by evaporation and diluted with 5 vols. heptane to precipitate an 11% yield of copolymer which was separated, washed twice with heptane and once with heptane containing 0.2% III, and dried in vacuo for 16 hrs. at 80°C. The copolymer had reduced sp. viscosity 1 (0.1% in α -chloronaphthalene), contained 45% I, and was a tough, snappy rubber. The ether-insol. copolymer (100 parts) was mixed with Bu3N 10, mercaptobenzothiazole 1.5, S 2, ZnO 3, and stearic acid 2 parts and cured 40 min. at 310°F. The cured polymer gave 97% gel and 600% swell in toluene (4 hrs. at 80°C.). The heptane-insol. copolymer (100 parts) was mixed with 2 parts hexamethylenediamine carbamate and cured 40 min. at 310°F. The cured polymer gave 86% gel and 605% swell in toluene. I-3,3-dimethyloxetane copolymers, I-2-methyloxetane copolymers, and I-II-propylene oxide copolymers are prepared and vulcanized similarly.				

L4 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1962:79308 CAPLUS
 DN 56:79308
 OREF 56:15451h-i,15452b-e
 TI Reactivity of oxetanes disubstituted in the 3-position by carrier radicals of functional groups. I. Reactions not affecting the heterocycle
 AU Chabrier, Pierre; Seyden-Penne, Jacqueline
 CS Fac. Med., Paris

- SO Bulletin de la Societe Chimique de France (1961) 2074-7
CODEN: BSCFAS; ISSN: 0037-8968
- DT Journal
- LA Unavailable
- AB Substitution reactions in the 3-position using secondary amines, p-nitrobenzoates, tosylates, and carbamates with 3-(bromomethyl)-3-(hydroxymethyl)oxetane (I) are described and the resulting derivs. discussed. A benzene solution of I is heated with Me₂NH in a sealed container 8 hrs. at 120° to yield 3-(dimethylaminomethyl)-3-(hydroxymethyl)oxetane (II), m. 62.4° (hexane), b₁₂ 111-13°; methobromide m. 201°. I in benzene is heated with piperidine in a sealed tube at 120° 8 hrs. to give 3-(piperidinomethyl)-3-(hydroxymethyl)oxetane, b₁₂ 151-5°, m. 38-9° (hexane). II kept with Ac₂O in pyridine in the cold and then refluxed 2 hrs. gives 3-(dimethylaminomethyl)-3-(acetoxymethyl)oxetane, b₁₈ 127.9°; methobromide m. 237°. The Williamson ether synthesis applied to I gives 3-(aryloxymethyl)-3-(hydroxymethyl)oxetanes (III), which give p-nitrobenzoates (IV) with p-O₂NC₆H₄COCl in toluene at 0° with piperidine (aryl and m.p. given): Ph, 104°; o-tolyl, 66°; o-MeOC₆H₄, 109-10°; o-ClC₆H₄, 80°; p-ClC₆H₄, 103°. IV (aryl = Ph) with pyridine-HCl in anhydrous pyridine gives HOCH₂(PhOCH₂)C(CH₂Cl)CH₂O₂CC₆H₄NO₂-p (V), m. 80-1°. V and IV (aryl = Ph) both give, when treated with p-O₂NC₆H₄COCl, ClCH₂(PhOCH₂)C(CH₂O₂CC₆H₄NO₂-p)₂, m. 109°. III (aryl = Ph) and p-MeC₆H₄SO₂Cl in toluene with pyridine give the tosylate, m. 95°. III treated cold with COCl₂ in toluene with pyridine and the intermediate chloride treated with NH₃ in the cold give the following 3-(aryloxymethyl)-3-(carbamoyloxymethyl)oxetanes (aryl and m.p. given): o-tolyl, 143°; o-MeOC₆H₄, 116°; o-ClC₆H₄, 139°; p-ClC₆H₄, 134-5°. Thus, under the conditions where the ethylene oxide ring and its derivs. such as epichlorohydrin and glycidic ethers are split, the 1,3-epoxide function of 3-(bromomethyl)-3-(hydroxymethyl)oxetane is stable. Nucleophilic reagents, e.g. amines or phenoxide ions, substitute for the Br atom while the OH group is easily esterified so as to be inactive in the presence of protons.
- L4 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 1962:60498 CAPLUS
- DN 56:60498
- OREF 56:11529i,11530a
- TI Infrared spectra of oxetanes substituted in the 3,3-position by carrier radicals of functional groups
- AU Guepet, Rene; Seyden-Penne, Jacqueline; Piganiol, Pierre; Chabrier, Pierre
- CS Fac. Med., Paris
- SO Bulletin de la Societe Chimique de France (1961) 2081-3
CODEN: BSCFAS; ISSN: 0037-8968
- DT Journal
- LA Unavailable
- AB An investigation is made of the IR spectra of 3,3-substituted derivs. of trimethylene oxide. The bands corresponding to the sym. and antisym. vibrations of the ring, affecting the C-O-C bond, have a constant frequency within the limits 960 to 980 cm.⁻¹, regardless of the substituents on the ring.
- L4 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 1961:59205 CAPLUS

DN 55:59205
 OREF 55:11311e-i,11312a
 TI Substituted 3-halo-1-propyl carbamates
 IN Mooradian, Aram
 PA Sterling Drug Inc.
 DT Patent
 LA Unavailable
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 850003		19600928	GB 1959-14249	19590427

AB The title compds., possessing central nervous system depressant activity, were prepared from substituted 3-halo-1-propanols. EtC(CH₂OH)₃ (135 g.) and 158 g. pyridine was heated to reflux, treated dropwise with 238 g. SOCl₂, the mixture refluxed till gas evolution ceased, left overnight at room temperature, and dissolved in Et₂O. The Et₂O solution was washed with H₂O and dilute aqueous HCl, dried, and distilled to give 89.6 g. (ClCH₂)₂C(CH₂OH)Et (I), b₂₇ 129°. Similarly prepared were: (ClCH₂)₂C(CH₂OH)Me, b₃₂ 116-20°; Pr(ClCH₂)C(CH₂OH)Me (II), b₂₃ 104-8°; ClCH₂C(CH₂OH)Me₂, b₃₂ 84-6°; (ClCH₂)₂C(CH₂OH)Pr (III), b₁₅ 124-7°; ClCH₂C(CH₂OH)Et₂, b₁₁ 95-100°; Me(CH₂)₄C(CH₂Cl)₂CH₂OH, b₂₇ 168-70°; and Me(ClCH₂)C(CH₂OH)Et, b₁₀₀ 132-6°. I (17.1 g.) and 12.1 g. PhNMe₂ in 50 ml. CHCl₃ was added to 10 g. COCl₂ in 100 ml. PhMe at -10 to 0°, the solution left overnight at room temperature, saturated with NH₃ gas, filtered, the filtrate washed with dilute HCl, and evaporated to give 14 g. (ClCH₂)₂C(CH₂CONH₂)Et, m. 78-9° (n-pentane-C₆H₆). Similarly prepared were: (ClCH₂)₂C(CH₂CONH₂)Me₂, m. 75.5-8.5° (C₆H₆); Pr(ClCH₂)C(CH₂CONH₂)Me, m. 51-3° (n-pentane); ClCH₂C(CH₂CONH₂)Me₂, m. 79-81.5° (C₆H₆); Me(CH₂)₄C(CH₂Cl)₂CH₂CONH₂, m. 65-7.5°; Me(ClCH₂)C(CH₂CONH₂)Et, m. 52.5-4.5° (n-hexane); and (ClCH₂)₃CCH₂CONH₂, m. 58-60° (n-hexane). II (75.3 g.) and 11.5 g. Na in 750 ml. was refluxed 4 hrs., filtered, and the filtrate distilled to give 43.5 g. 3-methyl-3-propyloxetane (IV), b. 139-40°. IV (11.4 g.) was slowly added to 10 g. HBr in 250 ml. anhydrous Et₂O, the mixture left overnight, and distilled to give 16 g. Pr(BrCH₂)C(CH₂OH)Me, b₁₃ 106-7°. Similarly prepared was Pr(ICH₂)C(CH₂OH)Me, b₁₁ 118°. III (22.1 g.) and 14.6 g. PhNMe₂ in 45 ml. CHCl₃ was added dropwise to 12 g. COCl₂ in 120 ml. PhMe at 0°, the solution allowed to warm to room temperature, left overnight, saturated with NH₃, diluted with H₂O, shaken with Et₂O, the organic layer separated, washed with dilute aqueous HCl, evaporated, the crystalline residue dissolved in Et₂O, decolorized with C, filtered, the filtrate partially evaporated, and treated with n-hexane to precipitate crystalline (ClCH₂)₂C(CH₂CONH₂)Pr, m. 80-2°. Similarly prepared were: ClCH₂C(CH₂CONH₂)Et₂, m. 91.5-4.0° (n-hexane); Pr(BrCH₂)C(CH₂CONH₂)Me, m. 58-60.5° (Et₂O-hexane); and Pr(ICH₂)C(CH₂CONH₂)Me, m. 56-8° (n-hexane).

L4 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1961:27810 CAPLUS
 DN 55:27810
 OREF 55:5450h-i,5451a
 TI Reactivity of 3-aryloxymethyl-3-(hydroxymethyl)oxetanes
 AU Seyden-Penne, Jacqueline

CS Inst. pharmacol., Paris
 SO Compt. rend. (1960), 251, 1294-6
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB $\text{O.CH}_2\text{CH}_2\text{C}(\text{CH}_2\text{OH})\text{CH}_2\text{OAr}$ (I) heated with dilute H_2SO_4 in the presence of p-dioxane gave $(\text{HOCH}_2)_3\text{CCH}_2\text{OAr}$. With 25% HBr or concentrated HCl in heterogeneous phase or in aqueous dioxane, I gave $(\text{HOCH}_2)_2\text{C}(\text{CH}_2\text{X})\text{CH}_2\text{OAr}$ (II) ($\text{X} = \text{Cl}$ or Br , resp.). I with cold absolute EtOH in the presence of H_2SO_4 gave II ($\text{X} = \text{OEt}$). The oxetane ring of I was attacked with secondary amines in the aqueous phase at 170° or above generally to form II ($\text{X} = \text{NR}_2$). Secondary reactions occurred when the Ph was substituted. With $\text{Ar} = \alpha\text{-ClOH}_7$, the product was $(\text{HOCH}_2)_2\text{C}(\text{CH}_2\text{NMe}_2)_2$. The nucleophilic attack by phenoxide ion necessitated temps. above 175° and II ($\text{X} = \text{OAr}$) formed. The relative inertness of the oxetane ring in alkaline media permitted preparation of derivs. of the primary alc. (acetate, benzoate, p-nitrobenzoate, and carbamate) without altering the ring.

L4 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1957:51793 CAPLUS
 DN 51:51793
 OREF 51:9564a-h
 TI Oxetanes. VI. Reductive cleavage and substituent effects
 AU Searles, Scott, Jr.; Pollart, Kenneth A.; Lutz, Eugene F.
 CS Kansas State Coll., Manhattan
 SO Journal of the American Chemical Society (1957), 79, 948-51
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA Unavailable
 OS CASREACT 51:51793
 AB cf. C.A. 49, 10174d. $\text{Cl}(\text{CH}_2)_2\text{COEt}$ (241 g.) in 500 cc. Et_2O reduced with 25 g. LiAlH_4 in 700 cc. Et_2O yielded 174 g. $\text{Cl}(\text{CH}_2)_2\text{CH}(\text{OH})\text{Et}$ (I), $b_{25} 82^\circ$, $n_{\text{D}20} 1.4435$. I (174 g.) and 178 g. pyridine in 200 cc. CHCl_3 treated with cooling with 173 g. AcCl , allowed to stand overnight, washed, and worked up gave 200 g. acetate (II) of I, $b_{20} 82-4^\circ$, $n_{\text{D}20} 1.4310$. II (100 g.) added dropwise at 150° to 200 g. KOH , 200 g. NaOH , and 20 cc. H_2O , the mixture heated to 170° , and treated with 50 cc. H_2O , the gaseous product condensed in a cold trap, and the condensate dried with KOH pellets and distilled from Na gave 35.5 g. 2-ethyloxetane (III), $b_{730} 87^\circ$, $n_{\text{D}20} 1.4040$, $d. 0.850$. $\text{Cl}(\text{CH}_2)_2\text{Ac}$ treated with LiAlH_4 , and the mixture treated directly with 2 mole equivs. AcCl yielded 55% 2-methyloxetane (IV), $b. 59^\circ$, $n_{\text{D}20} 1.3913$. $\text{BrCH}_2\text{CHMeCO}_2\text{Me}$ (125 g.) (obtained in 90% yield from dry HBr and $\text{CH}_2\text{:CMeCO}_2\text{Me}$) in 300 cc. Et_2O treated with 20 g. LiAlH_4 in Et_2O gave 70.7 g. $\text{BrCH}_2\text{CHMeCH}_2\text{OH}$ (V), $b_{20} 81-2^\circ$, $n_{\text{D}20} 1.4824$; 3,5-dinitrobenzoate, $m. 81^\circ$ (from EtOH). Iso-BuOH was identified as a by-product. AcCl (102 g.) added with stirring and cooling to 133 g. V in 104 g. pyridine and 150 cc. Et_2O gave 157 g. acetate (VI) of V, $b_{21} 90-1^\circ$, $n_{\text{D}20} 1.4553$. VI (151 g.) treated in the usual manner with caustic yielded 22.3 g. 3-methyloxetane (VII), $b. 67^\circ$, $n_{\text{D}20} 1.3956$. $\text{Cl}(\text{CH}_2)_2\text{COC}_1$ stirred 15 hrs. in the cold with AlCl_3 in C_6H_6 gave 93% $\text{Cl}(\text{CH}_2)_2\text{Bz}$ (VIII), $m. 52^\circ$. VIII reduced in the usual manner with LiAlH_4 gave 87% $\text{Cl}(\text{CH}_2)_2\text{CH}(\text{OH})\text{Ph}$ (IX), $b_{0.03} 75^\circ$, $n_{\text{D}20} 1.5412$. IX (93.7 g.) in 65 g. pyridine and 100 cc. dry Et_2O treated dropwise with 65 g. AcCl gave 95 g. acetate (X) of IX, $b_{0.1} 84-5^\circ$, $n_{\text{D}20} 1.5121$. X (41 g.) added dropwise with stirring at 130° to 252 g. KOH in 100 cc. H_2O , the mixture heated to 170°

and treated with steam, the distillate extracted with Et₂O, and the extract worked up gave 17.5 g. 2-phenyloxetane (XI), b_{0.5} 52°, b₈ 87-8°, n_D20 1.5288, d₂₀ 1.023. IX treated with hot alkali gave 58% pure XI. IV (15 g.) in 50 cc. Et₂O added to 4.0 g. LiAlH₄ in 100 cc. Et₂O, refluxed 3 hrs., hydrolyzed with 20% aqueous Na₂CO₃, and filtered, the filter cake washed with Et₂O, and the combined filtrate and washings distilled yielded 2 g. unchanged IV and 4.6 g. EtMeCHOH, b. 95-7°, n_D20 1.3958 (3,5-dinitrobenzoate, m. 71-2°). A similar run in tetrahydrofuran refluxed 7 hrs. yielded 60% EtMeCHOH. A series of similar cleavage reactions with LiAlH₄ and various oxetanes was carried out (oxetane, resulting alc., % yield in 3-hr. run in Et₂O, % yield in 7-hr. run in tetrahydrofuran, b.p. and n_D20 of alc., and m.p. of 3,5-dinitrobenzoate given): oxetane (XII), PrOH, 45, 65, 93-4°, -, 74°; III, Et₂CHOH, 31, 56 (14 hrs.), 112°, 1.4104, 97°; VII, Me₂CHCH₂OH, -, 66, 106°, 1.3959, 86°; 2,3-dimethyloxetane (XIII), iso-PrMeCHOH, -, 58 (26 hrs.), 108-10°, 1.3972, 76°; 3-ethyl-2-propyloxetane (XIV), PrCH(OH)CH₂EtMe, -, 72 (37 hrs.), b₃₈ 82-4°, 1.4235, 91-2°; 2,2-dimethyloxetane (XV) (b₇₄₂ 70°, n_D20 1.3907), EtMe₂COH, -, 55 (13 hrs.), 99-101°, 1.4020, -; XI, EtPhCHOH, 36, 70 (73% at 20 hrs.), b₇ 95°, 1.5255, - [N-(α-naphthyl)carbamate, m. 101°]; 3,3-dimethyloxetane, Me₃CCH₂OH, less than 5%, 32 (20 hrs.), 110-11° (m. 52°), - (N-phenyl-carbamate, m. 113-14°); 3,3-diethyloxetane (XVI) (b. 138-40°, n_D20 1.4230), Et₂MeCH₂OH, -, 43 (40 hrs.), 156.5°, -, (H tetrachlorophthalate, m. 146-7°); 2,2-diethyloxetane (XVII) (b. 124-6°, n_D23 1.4168), Et₃COH, -, 42, 136-8°, 1.4265, - (altophanate, m. 170°). XI (13.4 g.), 1.1 g. LiBH₄, and 100 cc. Bu₂O stirred 44 hrs. at 120-5° and processed in the usual manner yielded 5.5 g. EtPhCHOH and 4.1 g. unchanged XI. XII (4.5 g.) hydrogenated 3 hrs. at 150° over 2 g. Raney Ni and distilled gave 1.1 g. PrOH, b₇₃₅ 93-4°, and 2.0 g. colorless liquid, b₇₃₅ 170° to b₈ 150°, possibly a mixture of CH₂(CH₂OH)₂, H(OCH₂CH₂CH₂)₃OH, etc.

L4 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1940:35946 CAPLUS

DN 34:35946

OREF 34:5415b-c

TI The amino derivatives of pentaerythritol. V. Trihydroxymonoaminotetramethylmethane

AU Govaert, F.; Beyaert, M.

SO Proc. Acad. Sci. Amsterdam (1939), 42, 790-7

DT Journal

LA Unavailable

AB 3,3-Di(hydroxymethyl)oxacyclobutane, m. 84°, b_{0.04} 128°, was obtained in 81% yield by the action of KOH on monobromopentaerythritol. The ring was opened with aqueous NH₃ at 200° with the formation of 60% of the monoamine, m. 207°. The tetra-Ac derivative, b_{0.04} 173°, is a colorless very viscous liquid; the carbamate, (HOCH₂)₃CCH₂NHCOOH.H₂NCH₂C(CH₂OH)₃, m. 149° (decomposition); the oxalate, (C₅H₁₃O₃N)₂.H₂C₂O₄, m. 206°; and the picrate, C₅H₁₃O₃N.C₆H₂(NO₂)₃OH, m. 98°.

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST	0.60	203.13
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-49.14

FILE 'CAPLUS' ENTERED AT 10:59:08 ON 27 APR 2007
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Apr 2007 VOL 146 ISS 19
 FILE LAST UPDATED: 26 Apr 2007 (20070426/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> d his

(FILE 'HOME' ENTERED AT 10:21:10 ON 27 APR 2007)

FILE 'CAPLUS' ENTERED AT 10:21:28 ON 27 APR 2007

L1 4682 S OXETANE
 L2 11113 S ACRYLOYL
 L3 28 S L1 AND L2
 L4 26 S L1 AND CARBAMATE
 L5 4 S L4 AND ISOCYANATE

FILE 'STNGUIDE' ENTERED AT 10:48:08 ON 27 APR 2007

FILE 'CAPLUS' ENTERED AT 10:51:10 ON 27 APR 2007

FILE 'STNGUIDE' ENTERED AT 10:51:10 ON 27 APR 2007

FILE 'CAPLUS' ENTERED AT 10:52:52 ON 27 APR 2007

FILE 'STNGUIDE' ENTERED AT 10:52:54 ON 27 APR 2007

FILE 'CAPLUS' ENTERED AT 10:59:08 ON 27 APR 2007

=> d 13 1-23 bib abs

L3 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2007:116310 CAPLUS

DN 146:172007
 TI Fabrication of optical members including index-different sections with variety of shape
 IN Koho, Satoshi; Eriyama, Yuichi
 PA Jsr Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 17pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2007025091	A	20070201	JP 2005-205132	20050714
PRAI	JP 2005-205132		20050714		

AB The process involves these steps; applying compns. of (A) radical monomers, (B) radical initiators, (C) cationic polymerization monomers, and optionally (D) cationic photopolymn. initiators on supports, exposing the same to light in atmospheric containing ≥ 1 volume% O, and heating or exposing the same to light with different wavelength from that of the former, to form polymers of C around and/or upon the preformed polymers of A. The C polymers have smaller n than that of A polymers. Waveguides or microlens arrays can be manufactured as above without development stage.

L3 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:1031534 CAPLUS
 DN 145:357658

TI Thermally radical- and thermally cationic-curable vinyl polymer compositions with low viscosity and high mechanical strength
 IN Tamai, Hitoshi; Nakagawa, Yoshiki
 PA Kaneka Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 44pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2006265483	A	20061005	JP 2005-89220	20050325
PRAI	JP 2005-89220		20050325		

AB The compns., useful for seals and gaskets, comprise vinyl polymers having ≥ 2 O₂CCRa:CH₂ (I; Ra = H, C1-20 organic group) in a mol. containing ≥ 1 I at end groups and epoxides and/or oxetane compds. Thus, a composition comprising acryloyl-terminated Bu acrylate-Et acrylate-2-methoxyethyl acrylate copolymer manufactured by living atom transfer radical polymerization (ATRP) in the presence of CuBr 70, benzoperoxide (Nyper BW) 0.7, 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate (Celloxide 2021P) 30, thermally cationic polymerization catalyst of (2-butenyl)tetramethylenesulfonium hexafluoroantimonate (Adeka Opton CP 77) 0.45 part was hot-pressed into a sheet showing 30% modulus (JIS K 6301) 0.22 MPa, strength at break 1.42 MPa, and elongation at break 115%.

L3 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:489898 CAPLUS
 DN 145:9782

TI Coating compositions with good scratch, acid, and solvent resistance for automobile bodies
 IN Maeda, Shinichi; Saito, Yoshikazu; Toyama, Masayuki; Hayama, Yasushi

PA Mitsubishi Rayon Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2006131670	A	20060525	JP 2004-319366	20041102
PRAI	JP 2004-319366		20041102		

AB Title coating compns. comprise (A) a compound having a (meth) acryloyl group and an anhydride group formed by at least two carboxylic acid groups or one ester group and a carboxylic acid group, an acrylic copolymer having at least an epoxy group or an oxetane group, and a radical polymerization initiator. Thus, styrene 20, tridecyl methacrylate 15, glycidyl methacrylate 45, and 4-hydroxybutyl acrylate were polymerized to give a copolymer with epoxy equivalent 315 g/equiv and weight average

mol. weight 5000, 315 parts of which was mixed with 2-acryloyloxy trimellitic anhydride obtained from 2-hydroxyethyl acrylate and trimellitic anhydride 283, 1-hydroxycyclohexylphenylketone 18, Sanol LS 765 12, tetraethylphosphonium bromide 6, and Modaflow 1.2 parts, applied on a coated steel plate, dried at 160° for 30 min, and irradiated with a UV ray to give a test piece, showing good acid, solvent, and scratch resistance, and gloss retention, and pencil hardness F.

L3 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:199643 CAPLUS

DN 145:505777

TI Development of high performance photo-curable polymers and oligomers using novel reactions of oxetane compounds

AU Nishikubo, Tadatomi; Kameyama, Atsushi

CS Department of Applied Chemistry, Faculty of Engineering, Japan

SO RadTech Europe 05: UV/EB--Join the Winning Technology, [Conference Proceedings], Barcelona, Spain, Oct. 18-20, 2005 (2005), Volume 2, 43-47
 Publisher: RadTech Europe Association, The Hague, Neth.

CODEN: 69HVYN

DT Conference; General Review

LA English

AB A review. The authors recently found many new addition reactions of oxetanes with certain reagents such as phenols and carboxylic acids using certain quaternary onium salts or crown ether complexes as catalysts. More recently, we also found new anionic ring-opening polymerization of oxetanes containing pendant hydroxyl groups and alternating anionic ring-opening copolymn. of oxetanes with cyclic carboxylic anhydrides using appropriate catalyst system. These reactions have been widely applied to the synthesis of polymers and thermo-setting reactions of oxetane resins. In this paper, we would like to introduce the application of these new reactions for the synthesis of high performance photo-curable polymers and oligomers containing pendant or terminal (meth)acryloyl groups. The authors also report the photochem. property of the resulting polymers and oligomers. Furthermore, the authors would like to talk about the synthesis of certain calixarenes and poly(imide)s containing oxetane groups as high performance materials and their photochem. reaction.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:1075860 CAPLUS
 DN 143:368070
 TI Photoradically/photocationically curable compositions with low viscosity
 IN Okada, Kenji; Nakagawa, Yoshiki
 PA Kaneka Corporation, Japan
 SO PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005092981	A1	20051006	WO 2005-JP5510	20050325
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2561169	A1	20051006	CA 2005-2561169	20050325
	EP 1728826	A1	20061206	EP 2005-727009	20050325
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	CN 1938377	A	20070328	CN 2005-80009881	20050325
PRAI	JP 2004-92556	A	20040326		
	WO 2005-JP5510	W	20050325		

AB Title compns. comprise (A)≥2 acryloyl group-containing vinyl polymers (≥1 acryloyl group is a terminal group), (B) epoxy compds. and/or oxetane compds., (C) photoradical initiators, and (D) photocationic initiators. Thus, Bu acrylate, Et acrylate, and 2-methoxyethyl acrylate were polymerized in the presence of copper (I) bromide, pentamethyldiethylenetriamine, and di-Et 2,5-dibromoadipate, potassium acrylate was added therein and reacted to give acryloyl-terminated copolymer with number average mol. weight 16,900 and polydispersity 1.14, 100 parts of which was mixed with 2,2-diethoxyacetophenone 0.2, Epolite 4000 30, Adeka Optomer SP 172 1.5, and Irganox 1010 1 parts to give a composition with viscosity 150 Pa-s at 23°, which was cured by irradiation to give a cured product, showing 30% modulus 0.52 MPa, tensile strength at break 0.94 MPa, and elongation at break 52%.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:823679 CAPLUS
 DN 143:212295
 TI Preparation of polymerizable (meth)acryloyl group-containing oxetane monomers
 IN Kamata, Hirotoishi; Morinaka, Katsutoshi; Uchida, Hiroshi
 PA Showa Denko K.K., Japan

SO PCT Int. Appl., 21 pp.

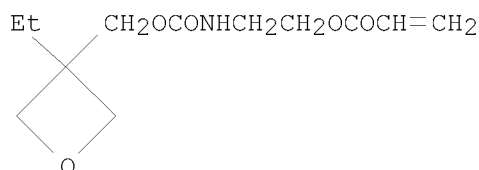
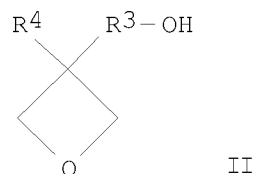
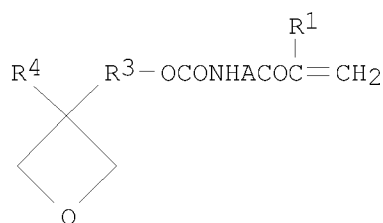
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005075445	A2	20050818	WO 2005-JP2381	20050209
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005255671	A	20050922	JP 2005-24723	20050201
	EP 1713787	A2	20061025	EP 2005-710281	20050209
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 2007060760	A1	20070315	US 2006-588072	20060731
PRAI	JP 2004-32867	A	20040210		
	US 2004-545488P	P	20040219		
	WO 2005-JP2381	W	20050209		
OS	MARPAT 143:212295				
GI					

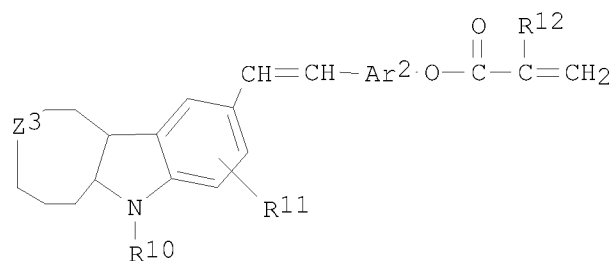


AB Polymerizable (meth)acryloyl group-containing oxetane [I;
 A = OR2, direct bond; R2 = divalent hydrocarbonyl (which may contain an oxygen atom in the main chain); R1 = H, CH3; R3 = C1-6 (un)branched alkylene; R4 = C1-6 (un)branched alkyl] monomers are prepared in high yield

and selectivity by the addition reaction of (meth)acrylate isocyanates $\text{H}_2\text{C}=\text{C}(\text{R}_1)\text{CO}(\text{A})\text{NCO}$ with 3-(hydroxyalkyl)-substituted oxetanes (II) in the presence of a tertiary amine or tin-compound catalyst. Thus, 2-acryloyloxyethyl isocyanate was mixed in Et acetate containing dibutyltin dilaurate and reacted with 3-ethyl-3-(hydroxymethyl)oxetane, producing an oxetanyl group-containing methacrylate ester monomer (III).

L3 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:428262 CAPLUS
 DN 142:482780
 TI Electrically conductive polymers containing condensed indoline rings and their manufacture
 IN Koderu, Tatsuya
 PA Mitsubishi Paper Mills, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005126493	A	20050519	JP 2003-361092	20031021
PRAI	JP 2003-361092		20031021		
GI					



I

AB The manufacturing method of polymers, useful for electrophotog. photoreceptors, electroluminescent devices, etc., includes polymerizing I (R10 = alkyl, aryl, heterocyclic; R11 = H, amino, alkyl, alkoxy; R12 = H, alkyl; Ar2 = divalent group; Z3 = group forming saturated C5-8 ring). Manufacturing method including polymerizing mixts. of I and $\text{XCH}_2(\text{OCH}_2\text{CH}_2)_m\text{O}_2\text{CC}:\text{CH}_2\text{R}_2$ (II; X = 3-R1-3-oxetanyl; R1,2 = H, alkyl; m = 0-2) are also claimed. Thus, I (R10 = Ph, R11 = H, R12 = Me, Ar2 = phenylene, Z3 = cyclopentane) and II (X = 3-R1-3-oxetanyl; R1 = Et, R2 = Me, m = 0) were polymerized in the presence of AIBN to give a copolymer with Mn 63,000 and Mw 92,000. A multilayer photoreceptor containing charge-transporting layer comprising the copolymer showed electrostatic potential -600 V at applied voltage -6 kV and light exposure for decreasing the potential in half (E1/2) 1.0 lx-s.

L3 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:155387 CAPLUS
 DN 142:246263
 TI Dental adhesive composition
 IN Anzai, Misaki; Kawaguchi, Motoki
 PA Dentsply-Sankin K. K., Japan
 SO Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1508321	A1	20050223	EP 2004-19518	20040817
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	JP 2005065902	A	20050317	JP 2003-298363	20030822
	US 2005054749	A1	20050310	US 2004-920358	20040818
PRAI	JP 2003-298363	A	20030822		

AB A dental adhesive composition which can quickly be hardened even in the presence of oxygen without using a radical generating agent such as a peroxide or a photopolymn. initiator, to give high bond strength, comprises a carboxylic acid having a (meth)acryloyl group and a carboxyl group, both of which are attached to an aromatic ring; a bisphenol A derivative having 2 (meth)acryloyl groups; a hydroxylalkyl (meth)acrylate; a (meth)acrylate derivative having an acid group; and at least one polymerization initiator selected from the group consisting of aromatic amines, aliphatic amines, and aromatic sulfinic acids, the composition being substantially free from any radical polymerization initiator. Thus, a composition was obtained from different methacryloyl monomers.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:13763 CAPLUS
 DN 142:103247
 TI High-sensitivity shrink-proof holographic recording materials containing epoxides, their manufacture, and their recording
 IN Sasa, Nobumasa
 PA Konica Minolta Medical & Graphic, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 20 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005003958	A	20050106	JP 2003-167597	20030612
PRAI	JP 2003-167597		20030612		
OS	MARPAT 142:103247				
AB	The holog. recording materials contain (A) epoxides containing ≥ 1 substituted oxirane rings on α and/or β sites of oxirane rings, epoxidized fatty acid esters, epoxidized fatty acid glycerides, (B) photopolymn. initiators, and optionally, (C) oxetane ring-containing compds. and/or vinyl ethers, (D) (meth)acryloyl group-containing				

comps. and photoradical polymerization initiators. The holog. recording materials form matrixes by ≥ 1 polymerization reaction selected from cationic epoxy polymerization, cationic vinyl ether polymerization, cationic alkenyl ether polymerization, cationic arene ether polymerization, cationic ketene acetal polymerization, epoxy-amine step polymerization, epoxy-mercaptan step polymerization, unsatd. ester-amine step polymerization, unsatd. ester-mercaptan step polymerization, vinyl-silicone hydride step polymerization, isocyanate-hydroxyl step polymerization, and isocyanate-amine step polymerization. In another alternative, the holog. recording materials form matrixes by curing of inorg. or organic matrix precursors which may comprise $R_nM(OR')_{4-n}$ ($M = \geq 3$ -valent metal element, preferably, Si, Ti, Ge, Zr, V, Al; $R = \text{alkyl, allyl}$; $R' = C \leq 4$ lower alkyl; $n = 1, 2$). The holog. recording materials are are manufactured by mixing matrix-forming substances, their curing to give matrixes, and irradiation with actinic light for holog. recording.

L3 ANSWER 10 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:1014409 CAPLUS

DN 142:7357

TI Active energy curable resin compositions with good curability and low reflectance angle for optical disks

IN Makino, Shinji

PA Mitsubishi Rayon Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004331872	A	20041125	JP 2003-131585	20030509
PRAI	JP 2003-131585		20030509		

AB Title compns. comprise (A) compds. having ≥ 2 oxetane rings, (B) compds. having ≥ 2 oxirane rings, (C) cationic photoinitiators, (D) compds. having ≥ 1 (meth) acryloyl group, and (E) radical photoinitiators. Thus, a composition comprising OXT 121 25, YD 8125 bisphenol A diglycidyl ether 25, UVI 6990 photoinitiator 3.0, U 2PHA diacrylate 5.0, and Irgacure 184 1.0 parts was applied on a silver-coated Panlite AD 9000TG optical disk and irradiated with a high pressure mercury lamp to give a test piece with reflectance angle 0.16° initially and 0.06° after durability test, transmittance 91% at 400 nm, 93% at 500 nm, and 93% at 700 nm, good surface hardness and reliability.

L3 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:996235 CAPLUS

DN 141:429659

TI Photocuring/thermosetting ink-jet composition and printed wiring board using same

IN Kakinuma, Masahisa; Kusama, Masatoshi; Ushiki, Shigeru

PA Taiyo Ink Manufacturing Co., Ltd., Japan

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004099272	A1	20041118	WO 2004-JP6029	20040507
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1624001	A1	20060208	EP 2004-731714	20040507
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
	CN 1784432	A	20060607	CN 2004-80012609	20040507
	US 2006058412	A1	20060316	US 2005-269836	20051109
PRAI	JP 2003-131742	A	20030509		
	WO 2004-JP6029	W	20040507		

AB A photocuring/thermosetting ink-jet composition contains (A) a monomer having a (meth)acryloyl group and a thermosetting functional group in the mol., (B) a photoreactive diluent other than the component (A) having a weight-average mol. weight of not more than 700, and (C) a photopolymer initiator, and has a viscosity of not more than 150 mPa·s at 25°. A solder resist pattern is directly drawn on a printed wiring board by an ink-jet printer using the above-mentioned composition, and the pattern is primarily cured by irradiation with an active energy beam and then further cured by heat.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:1000504 CAPLUS
DN 141:242819
TI Product class 4: organometallic complexes of copper
AU Heaney, H.; Christie, S.
CS Dept. of Chemistry, University of Loughborough, Loughborough, LE11 3TU, UK
SO Science of Synthesis (2004), 3, 305-662
CODEN: SSCYJ9
PB Georg Thieme Verlag
DT Journal; General Review
LA English
AB A review. The use of copper and related complexes in applications to organic synthesis is reviewed.
RE.CNT 1706 THERE ARE 1706 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

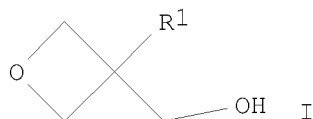
L3 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:929612 CAPLUS
DN 139:397036
TI Oxetane-base polyol (meth)acrylates, their curable compositions, and hard coatings containing them with good heat and water resistance

IN Sauchi, Yasuyuki; Sasaki, Hiroshi
 PA Toa Gosei Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2003335854	A	20031128	JP 2002-143719	20020517
PRAI	JP 2002-143719		20020517		
GI					



AB The invention relates to the (meth)acrylates having ≥ 2 (meth)acryloyl groups manufactured by heat-cationic-polymerizing I ($R_1 = H$, alkyl, aryl, arylalkyl) to obtain polyols and esterifying them with (meth)acrylic acid. Thus, a composition comprising 3-ethyl-3-(hydroxymethyl)oxetane homopolymer acrylate was applied on a substrate and UV-cured to give a coating showing pencil hardness 4H, storage modulus $1.08 + 10^9$ at 210° , and water absorption 1.32%.

L3 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:368907 CAPLUS

DN 138:369365

TI Oxetane-containing (meth)acrylate esters, their manufacture, and their use as dental monomers and monomers for grafting polyolefins

IN Miyazaki, Kazuhisa; Ota, Seiji; Akie, Hideyuki

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

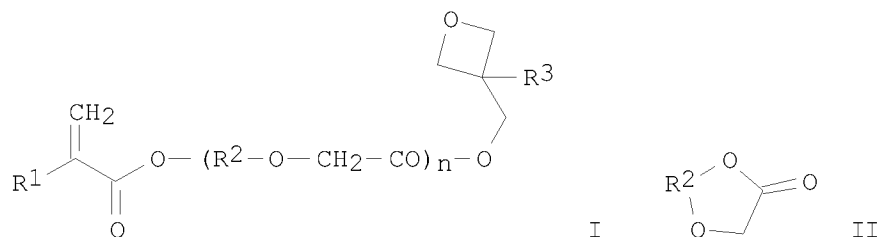
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2003137878	A	20030514	JP 2001-332394	20011030
PRAI	JP 2001-332394		20011030		
OS	MARPAT 138:369365				
GI					



AB Title esters I [$R_1 = H, Me$; $R_2 =$ (ether bond-containing) linear or branched alkylene; $R_3 =$ linear alkyl; $n = 1-4$], useful for coatings and adhesives as well, are manufactured by ring-cleavage esterification of lactones II ($R_2 =$ same as above) with 3-alkyl-3-hydroxymethyloxetane in the presence of base catalysts, followed by esterification of the resulting products with (meth)acryloyl halide. Thus, 1,4-dioxan-2-one was reacted with 3-ethyl-3-hydroxymethyloxetane in the presence of K_2CO_3 to give 28% 3-ethyl-3-oxetanylmethyl 2-hydroxyethoxyacetate, which was esterified with acryloyl chloride to give 40% 3-ethyl-3-oxetanylmethyl 2-acryloxyethoxyacetate.

L3 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:366797 CAPLUS

DN 138:369360

TI Oxetane-containing (meth)acrylate esters, their manufacture, and their use as dental monomers and monomers for grafting polyolefins

IN Miyazaki, Kazuhisa; Ota, Seiji

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

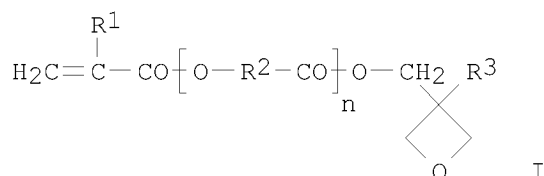
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2003137877	A	20030514	JP 2001-330883	20011029
PRAI	JP 2001-330883		20011029		
OS	MARPAT 138:369360				
GI					



AB Title esters I [$R_1 = H, Me$; $R_2 =$ (ether bond-containing) linear or branched alkylene; $R_3 =$ linear alkyl; $n = 1-4$], useful for coatings and adhesives as well, are manufactured by transesterification between $HO(R_2CO_2)_nR_4$ ($R_2, R_4, n =$ same as above) and 3-alkyl-3-hydroxymethyloxetane in the presence of catalysts, followed by esterification of the resulting products with

(meth)acryloyl halide. Thus, Et lactate was reacted with 3-ethyl-3-hydroxymethyloxetane in the presence of $\text{Ti}(\text{OCHMe}_2)_4$ to give 80% 3-ethyl-3-oxetanylmethyl lactate, which was esterified with acryloyl chloride to give 89% 3-ethyl-3-oxetanylmethyl 2-acryloxypropanoate.

L3 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:352823 CAPLUS
 DN 139:85711
 TI Combining Covalent and Noncovalent Cross-Linking: A Novel Terpolymer for Two-Step Curing Applications
 AU El-Ghayoury, Abdelkrim; Hofmeier, Harald; de Ruiter, Barteld; Schubert, Ulrich S.
 CS Laboratory of Macromolecular Chemistry and Nanoscience, Eindhoven University of Technology and Dutch Polymer Institute, Eindhoven, 5600, Neth.
 SO Macromolecules (2003), 36(11), 3955-3959
 CODEN: MAMOBX; ISSN: 0024-9297
 PB American Chemical Society
 DT Journal
 LA English
 AB A terpolymer of poly(Bu acrylate) bearing terpyridine as well as oxetane units was synthesized by free radical polymerization and characterized using NMR, UV-vis, and GPC. Subsequently, UV-vis expts. indicated clearly a noncovalent crosslinking of the terpyridine moieties by addition of iron(II) ions. Moreover, the ability of covalent crosslinking was studied by polymerizing the oxetane rings utilizing Lewis acids. IR spectroscopy and DSC expts. clearly revealed the success of the combination of both steps when utilizing iron(II) ions and AlCl_3 .
 RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:625102 CAPLUS
 DN 137:248043
 TI Atom transfer radical copolymerization (ATRCP) of a monomer bearing an oxetane group
 AU Singha, Nikhil K.; de Ruiter, Barteld; Schubert, Ulrich S.
 CS Lab. Macromolecular Organic Chem., Center Nanomaterials, Eindhoven Univ. Technology, Eindhoven, 5600 MB, Neth.
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2002), 43(2), 165-166
 CODEN: ACPPAY; ISSN: 0032-3934
 PB American Chemical Society, Division of Polymer Chemistry
 DT Journal; (computer optical disk)
 LA English
 AB The atom transfer radical polymerization of Me methacrylate with 3-ethyl-3-(acryloyloxymethyl)oxetane is described. Anal. of the copolymer confirmed that the oxetane ring did not open during polymerization
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:663120 CAPLUS
 DN 136:6399
 TI Synthesis and photochemical reaction of high performance UV curing

oligomers
 AU Nishikubo, Tadatomi; Kameyama, Atsushi
 CS Department of Applied Chemistry, Faculty of Engineering, Kanagawa University, Kanagawa-ku, Yokohama, 221-8686, Japan
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2001), 42(2), 722-723
 CODEN: ACPPAY; ISSN: 0032-3934
 PB American Chemical Society, Division of Polymer Chemistry
 DT Journal; (computer optical disk)
 LA English
 AB Calixarene derivs. containing (meth)acrylate, vinyl ether, propargyl ether, oxetane, oxirane, or spiro ortho ester groups were synthesized by reaction of calixarenes with (meth)acrylic acid derivs., vinyl ether compds., propargyl bromide, oxetane derivs., epibromohydrin, and spiro ortho ester derivs. The calixarene derivs. containing photoreactive groups had excellent thermal stability and high photochem. reactivity. The calixarene derivs. are of interest for UV curing systems, e.g., inks, coatings, solder masks, adhesives, and microelectronics uses.
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:143711 CAPLUS
 DN 134:194666
 TI Actinic ray-curable sulfur-containing compositions with good curability and manufacture of coatings
 IN Maruyama, Tsutomu
 PA Kansai Paint Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001055507	A	20010227	JP 1999-232626	19990819
PRAI	JP 1999-232626		19990819		

AB The compns. contain (A) 5-100 parts S-containing compds. manufactured by a reaction of compds. (average mol. weight 150-1000) having ≥ 2 SH and compds. having 1 acryloyl group and ≥ 2 alkoxysilyl groups and optional compds. having 1 acryloyl group and ≥ 1 epoxy groups and/or oxetane rings at acryloyl/SH molar ratio 0.5-1.2, (B) 0-95 parts photochem. cationically reactive compds., and (C) 0.05-20 parts photochem. cationic polymerization initiators. Thus, a composition containing 100 parts reaction product of pentaerythritol tetrakis(mercaptoacetate) and 3-acryloxypropyl trimethoxysilane and 4 parts CI 2758 (sulfonium salt-based initiator) was applied on a glass plate and cured by UV-irradiation to give a coating showing pencil hardness 6H.

L3 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:810952 CAPLUS
 DN 132:51248
 TI Photocurable hydrolyzed silane composition and photocured product
 IN Sekiguchi, Manabu; Sugiyama, Naoki; Sato, Hozumi

PA Jsr Corp., Japan
 SO Eur. Pat. Appl., 38 pp.
 CODEN: EPXXDW

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 965618	A1	19991222	EP 1999-111732	19990617
	EP 965618	B1	20040102		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000001648	A	20000107	JP 1998-170885	19980618
	JP 2000026730	A	20000125	JP 1998-194817	19980709
	TW 482817	B	20020411	TW 1999-88110061	19990616
	KR 2000006232	A	20000125	KR 1999-22643	19990617
	US 6207728	B1	20010327	US 1999-335269	19990617
	JP 2000109560	A	20000418	JP 1999-219938	19990803
	JP 2000109694	A	20000418	JP 1999-219939	19990803
	JP 2000109695	A	20000418	JP 1999-220750	19990804
PRAI	JP 1998-170885	A	19980618		
	JP 1998-194817	A	19980709		
	JP 1998-220512	A	19980804		
	JP 1998-220513	A	19980804		
	JP 1998-220514	A	19980804		

AB Disclosed is a photo-curable composition comprising the following components (A) to (C): (A) hydrolyzable silane compound represented by the general formula (1) or a hydrolyzate thereof: $(R_1)_pSi(X)_4-p$ (1) wherein R_1 is a non-hydrolyzable organic group having 1 to 12 carbon atoms, X is a hydrolyzable group, and p is an integer of 0 to 3; (B) photo acid generator; and (C) dehydrating agent. By such constitution, it is possible to provide a photo-curable composition which has a rapid photo-curable rate, is excellent in characteristics such as storage stability, heat resistance, weather-ability, scratch resistance and the like, and is applicable to base materials having low heat resistance such as plastics, as well as a cured product obtained therefrom.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1998:653719 CAPLUS
 DN 129:276496
 TI Hydrolyzable and polymerizable oxetanesilanes
 IN Moszner, Norbert; Volkel, Thomas; Stein, Sabine; Rheinberger, Volker
 PA IVOCLAR A.-G., Liechtenstein
 SO Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW

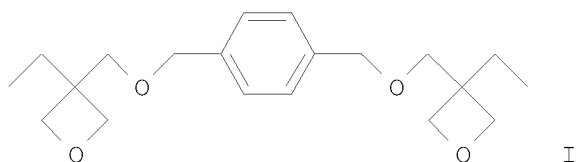
DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 867443	A2	19980930	EP 1998-250089	19980313
	EP 867443	A3	20000628		
	EP 867443	B1	20030806		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

DE 19714324	A1	19981029	DE 1997-19714324	19970325	
DE 19714324	B4	20040902			
AT 246691	T	20030815	AT 1998-250089	19980313	
CA 2232960	A1	19980925	CA 1998-2232960	19980324	
CA 2232960	C	20020129			
JP 10330485	A	19981215	JP 1998-77593	19980325	
US 6034151	A	20000307	US 1998-47592	19980325	
US 6096903	A	20000801	US 1998-47659	19980325	
US 6284898	B1	20010904	US 2000-591358	20000609	
PRAI DE 1997-19714324	A	19970325			
US 1997-52563P	P	19970715			
US 1997-52605P	P	19970715			
US 1998-47659	A3	19980325			
OS MARPAT 129:276496					
AB	The title compds., with specified structure, which can be polymerized at room temperature with very little shrinkage, are prepared Stirring 3-ethyl-3-(hydroxymethyl)oxetane with acryloyl chloride in Et2O containing collidine at room temperature for 6 h gave 50% acrylate ester, reaction of which with 3-(trimethoxysilyl)-1-propanethiol at room temperature for 48 h gave 81% (3-ethyl-3-oxetanyl)methyl 3-[[3-(trimethoxysilyl)propyl]thio]propionate (I). Hydrolytic polymerization of an equimolar mixture of I and Me2Si(OMe)2 in refluxing EtOH gave a condensate which was used in a dental cement.				
L3	ANSWER 22 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN				
AN	1997:579788 CAPLUS				
DN	127:235757				
TI	Coating composition comprising a bicyclo- or spiro-orthoester-functional compound				
IN	Van Den Berg, Keimpe Jan; Hobel, Klaus; Klinkenberg, Huig; Noomen, Arie; Van Oorschot, Josephus Christiaan				
PA	Akzo Nobel N.V., Neth.				
SO	PCT Int. Appl., 69 pp. CODEN: PIXXD2				
DT	Patent				
LA	English				
FAN.CNT 1					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 9731073	A1	19970828	WO 1997-EP892	19970221
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	NL 1002427	C2	19970826	NL 1996-1002427	19960223
	CA 2247126	A1	19970828	CA 1997-2247126	19970221
	AU 9720930	A	19970910	AU 1997-20930	19970221
	ZA 9701542	A	19980727	ZA 1997-1542	19970221
	EP 882106	A1	19981209	EP 1997-906123	19970221
	EP 882106	B1	20000809		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1214717	A	19990421	CN 1997-193266	19970221

CN 1128851	B	20031126		
BR 9707735	A	19990727	BR 1997-7735	19970221
EP 942051	A2	19990915	EP 1999-201141	19970221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000506908	T	20000606	JP 1997-529818	19970221
AT 195331	T	20000815	AT 1997-906123	19970221
ES 2150758	T3	20001201	ES 1997-906123	19970221
PT 882106	T	20010131	PT 1997-906123	19970221
US 6297329	B1	20011002	US 1997-804485	19970221
RU 2180674	C2	20020320	RU 1998-117558	19970221
IN 1997MA00954	A	20061006	IN 1997-MA954	19970506
TW 418241	B	20010111	TW 1997-86111273	19970806
NO 9803859	A	19981020	NO 1998-3859	19980821
AU 754919	B2	20021128	AU 2000-56513	20000906
GR 3034728	T3	20010131	GR 2000-402417	20001030
US 2002161135	A1	20021031	US 2001-935308	20010822
US 6593479	B2	20030715		
PRAI NL 1996-1002427	A	19960223		
US 1996-15878P	P	19960422		
EP 1997-906123	A3	19970221		
US 1997-804485	A3	19970221		
WO 1997-EP892	W	19970221		
AB	A coating composition comprises a first compound of ≥ 1 bicyclo- or spiro-orthoester group and a second compound of ≥ 2 hydroxyl-reactive groups. The latent hydroxyl groups of the bicyclo- or spiro-orthoester groups have to be deblocked and reacted with the hydroxyl-reactive groups of the second compound to be cured. Bicyclo-orthoester compds. are made from the corresponding oxetane compound, as are polymers comprising ≥ 1 bicyclo- or spiro-orthoester group. Thus, Desmodur N 3390 was mixed with 1,4-diethyl-2,6,7-trioxabicyclo[2.2.2]octane in the presence of p-MeC6H4SO3H and Bu2Sn dilaurate in solvent and sprayed onto steel panels showing pot life >1 day and dry time 100 min.			
L3	ANSWER 23 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN			
AN	1996:709842 CAPLUS			
DN	125:331792			
TI	Activation energy-curable coating compositions containing oxetane compounds with improved curability, gloss, adhesion, hardness, and crack resistance			
IN	Niwa, Makoto; Oota, Hiroyuki			
PA	Toa Gosei Kk, Japan			
SO	Jpn. Kokai Tokkyo Koho, 11 pp. CODEN: JKXXAF			
DT	Patent			
LA	Japanese			
FAN.CNT	1			
	PATENT NO.	KIND	DATE	APPLICATION NO.
	-----	----	-----	-----
PI	JP 08239623	A	19960917	JP 1995-64801
PRAI	JP 1995-64801		19950228	
GI				



AB The coating compns. comprise compds. having 1-4 oxetane rings, cationic photopolymn. initiators, and optionally epoxides, vinyl ethers, and (meth)acryloyl compds. Thus, 100 parts compds. having 2 oxetane rings I and 4 parts diphenyl[p-(phenylthio)phenyl]sulfonium hexafluoroantimonate were stirred to give a composition, which was applied to a plywood and exposed to UV to give test pieces with JIS A hardness 7, cross-cut adhesion 8-10, >90% in 60° gloss, pencil hardness 3H, and .apprx.0 crack after thermal crack test (80° for 2 h, -20° for 2 h, repeated 2 times).

=> d 118:7419 bib abs hitstr

ANSWER 1 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1993:7419 CAPLUS

DN 118:7419

TI Structure and reactivity relationships in the photoinitiated cationic polymerization of oxetane monomers

AU Crivello, J. V.; Sasaki, H.

CS Dep. Chem., Rensselaer Polytech. Inst., Troy, NY, 12180-3590, USA

SO Journal of Macromolecular Science, Pure and Applied Chemistry (1993), A30(2-3), 189-206

CODEN: JSPCE6; ISSN: 1060-1325

DT Journal

LA English

AB A series of oxetane-containing monomers possessing several different types of functional groups was prepared and characterized. These monomers were compared among themselves, and conclusions were drawn with respect to the influence of structure on their reactivities in photoinitiated cationic polymerization

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
73.56	276.69

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-18.72	-67.86

CA SUBSCRIBER PRICE

FILE 'STNGUIDE' ENTERED AT 11:06:11 ON 27 APR 2007

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE

AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 20, 2007 (20070420/UP).

```
=> d 118:7419 bib abs cn
'118:7419' IS NOT A VALID ACCESSION NUMBER
'BIB' IS NOT A VALID ACCESSION NUMBER
'ABS' IS NOT A VALID ACCESSION NUMBER
'CN' IS NOT A VALID ACCESSION NUMBER
```

The number entered is not a valid accession number in this file.
Enter "HELP ACCESSION" at an arrow prompt (=>) for a list of valid accession number formats in the current file.

```
=> d 118:7419 bib abs str
'118:7419' IS NOT A VALID ACCESSION NUMBER
'BIB' IS NOT A VALID ACCESSION NUMBER
'ABS' IS NOT A VALID ACCESSION NUMBER
'STR' IS NOT A VALID ACCESSION NUMBER
```

The number entered is not a valid accession number in this file.
Enter "HELP ACCESSION" at an arrow prompt (=>) for a list of valid accession number formats in the current file.

```
=> help accession
```

There is one format that may be used to input a STNGUIDE Accession Number in the DISPLAY ACC or PRINT ACC command.

The format is shown here:

STN output format ----- 210

```
=> fil reg
COST IN U.S. DOLLARS                SINCE FILE      TOTAL
                                     ENTRY      SESSION
FULL ESTIMATED COST                0.30      276.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                     ENTRY      SESSION
CA SUBSCRIBER PRICE                0.00      -67.86
```

FILE 'REGISTRY' ENTERED AT 11:09:10 ON 27 APR 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 APR 2007 HIGHEST RN 933069-51-3
DICTIONARY FILE UPDATES: 26 APR 2007 HIGHEST RN 933069-51-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when

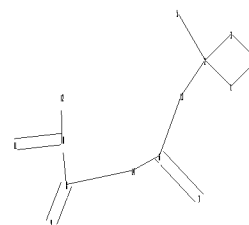
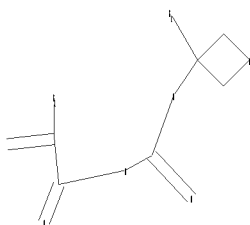
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\rkc072.str



```

chain nodes :
5 6 7 8 9 10 11 12 13 14
ring nodes :
1 2 3 4
chain bonds :
2-5 2-13 6-13 6-7 6-14 8-10 8-9 8-14 10-11 10-12
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :

```

2-5 2-13 6-13 6-7 6-14 8-9 8-14 10-12
 exact bonds :
 1-2 1-4 2-3 3-4 8-10 10-11
 isolated ring systems :
 containing 1 :

G1:Et,n-Pr,n-Bu,t-Bu

Match level :

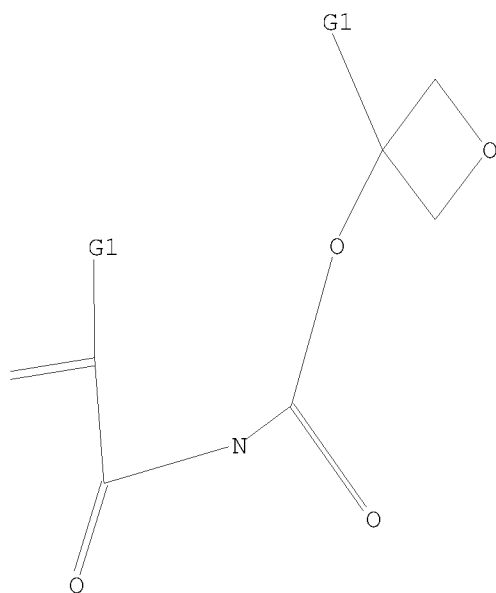
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS

L6 STRUCTURE UPLOADED

=> d 16

L6 HAS NO ANSWERS

L6 STR



G1 Et,n-Pr,n-Bu,t-Bu

Structure attributes must be viewed using STN Express query preparation.

=> s 16 ful

FULL SEARCH INITIATED 11:15:34 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS

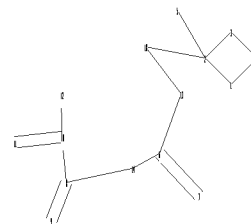
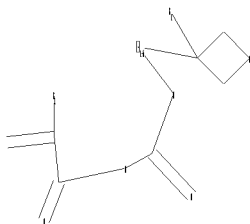
0 ANSWERS

SEARCH TIME: 00.00.01

L7 0 SEA SSS FUL L6

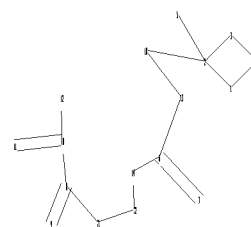
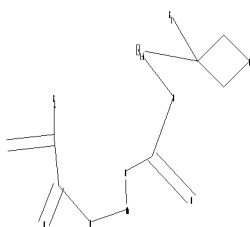
=>

Uploading C:\Program Files\Stnexp\Queries\rkc072b.str



```

chain nodes :
5  6  7  8  9  10  11  12  13  14  18
ring nodes :
1  2  3  4
chain bonds :
2-5  2-18  6-13  6-7  6-14  8-10  8-9  8-14  10-11  10-12  13-18
ring bonds :
1-2  1-4  2-3  3-4
exact/norm bonds :
2-5  6-13  6-7  6-14  8-9  8-14  10-12  13-18
exact bonds :
1-2  1-4  2-3  2-18  3-4  8-10  10-11
isolated ring systems :
containing 1 :
```

```

chain nodes :
5 6 7 8 9 10 11 12 13 14 18 21 22
ring nodes :
1 2 3 4
chain bonds :
2-5 2-18 6-13 6-7 6-14 8-10 8-9 8-21 10-11 10-12 13-18 14-22 21-22
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :
2-5 6-13 6-7 6-14 8-9 8-21 10-12 13-18 14-22 21-22
exact bonds :
1-2 1-4 2-3 2-18 3-4 8-10 10-11
isolated ring systems :
containing 1 :

```

G1:Et,n-Pr,n-Bu,t-Bu

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 21:CLASS 22:CLASS
Generic attributes :
22:
Type of chain          : Linear
Number of Carbon Atoms : less than 7

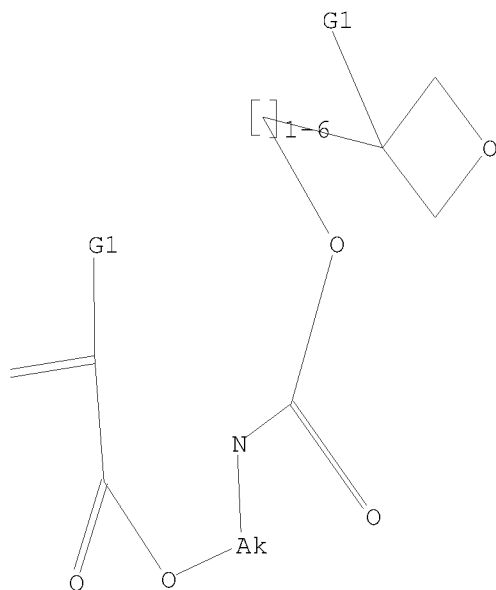
```

L10 STRUCTURE UPLOADED

$$\Rightarrow d$$

L10 HAS NO ANSWERS

L10 STR



G1 Et, n-Pr, n-Bu, t-Bu

Structure attributes must be viewed using STN Express query preparation.

=> s 110 ful

FULL SEARCH INITIATED 11:19:32 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 16 TO ITERATE

100.0% PROCESSED 16 ITERATIONS

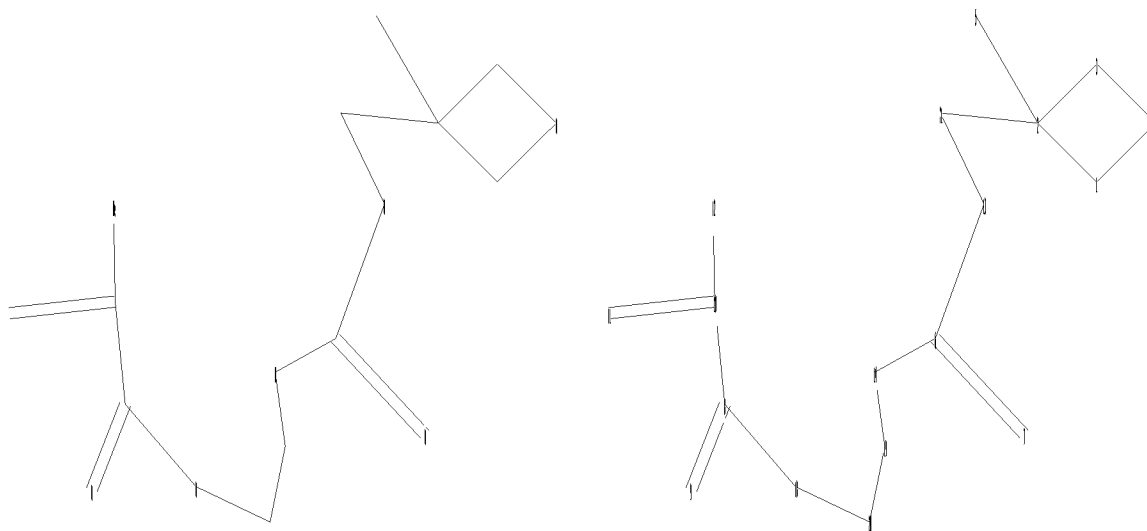
0 ANSWERS

SEARCH TIME: 00.00.01

L11 0 SEA SSS FUL L10

 \Rightarrow

Uploading C:\Program Files\Stnexp\Queries\rkc072d.str



```

chain nodes :
5  6  7  8  9  10 11 12 13 14 18 19 20 21
ring nodes :
1  2  3  4
chain bonds :
2-5 2-21 6-13 6-7 6-14 8-10 8-9 8-18 10-11 10-12 13-21 14-19 18-20
19-20
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :
6-13 6-7 6-14 8-9 8-18 13-21 14-19 18-20
exact bonds :
1-2 1-4 2-3 2-5 2-21 3-4 8-10 10-11 10-12 19-20
isolated ring systems :
containing 1 :

```

G1:Et,n-Pr,n-Bu,t-Bu

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS

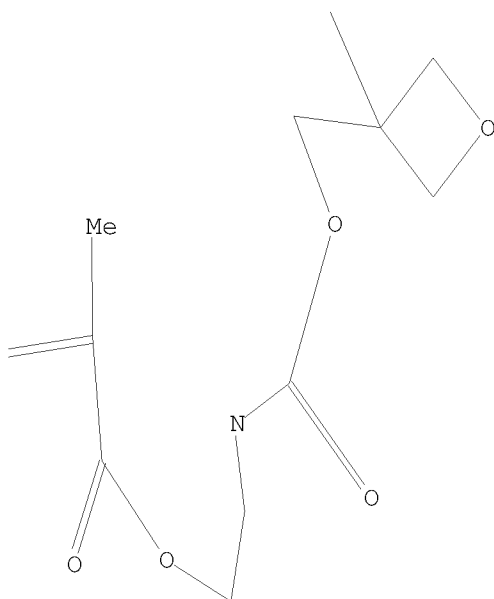
```

L12 STRUCTURE UPLOADED

```

=> d
L12 HAS NO ANSWERS
L12 STR

```



G1 Et,n-Pr,n-Bu,t-Bu

Structure attributes must be viewed using STN Express query preparation.

```
=> s k12 ful
L13      19180 K12
```

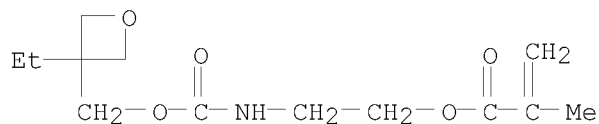
```
=> s l12 ful
FULL SEARCH INITIATED 11:22:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      6 TO ITERATE
```

```
100.0% PROCESSED      6 ITERATIONS      1 ANSWERS
SEARCH TIME: 00.00.01
```

```
L14      1 SEA SSS FUL L12
```

```
=> d
```

```
L14  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2007 ACS on STN
RN   862453-34-7  REGISTRY
ED   Entered STN:  02 Sep 2005
CN   2-Propenoic acid, 2-methyl-, 2-[[[(3-ethyl-3-oxetanyl)methoxy]carbonyl]ami
no]ethyl ester (9CI)  (CA INDEX NAME)
MF   C13 H21 N O5
SR   CA
LC   STN Files:   CA, CAPLUS, USPATFULL
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	703.85	980.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-67.86

FILE 'CAPLUS' ENTERED AT 11:22:45 ON 27 APR 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Apr 2007 VOL 146 ISS 19
FILE LAST UPDATED: 26 Apr 2007 (20070426/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l14

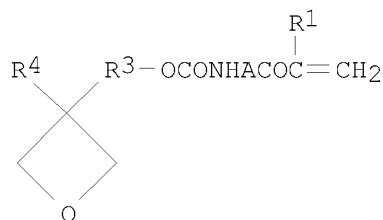
L15 1 L14

=> d bib abs hitstr

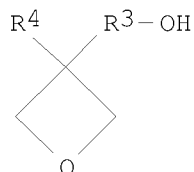
L15 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:823679 CAPLUS
DN 143:212295
TI Preparation of polymerizable (meth)acryloyl group-containing oxetane monomers

IN Kamata, Hirotooshi; Morinaka, Katsutoshi; Uchida, Hiroshi
 PA Showa Denko K.K., Japan
 SO PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

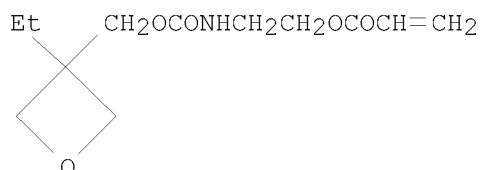
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005075445	A2	20050818	WO 2005-JP2381	20050209
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005255671	A	20050922	JP 2005-24723	20050201
	EP 1713787	A2	20061025	EP 2005-710281	20050209
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 2007060760	A1	20070315	US 2006-588072	20060731
PRAI	JP 2004-32867	A	20040210		
	US 2004-545488P	P	20040219		
	WO 2005-JP2381	W	20050209		
OS	MARPAT 143:212295				
GI					



I



II



III

AB Polymerizable (meth)acryloyl group-containing oxetane [I; A = OR₂, direct bond; R₂ = divalent hydrocarbyl (which may contain an oxygen atom in the

main chain); R1 = H, CH3; R3 = C1-6 (un)branched alkylene; R4 = C1-6 (un)branched alkyl] monomers are prepared in high yield and selectivity by the addition reaction of (meth)acrylate isocyanates $\text{H}_2\text{C}:\text{C}(\text{R}_1)\text{CO}(\text{A})\text{NCO}$ with 3-(hydroxyalkyl)-substituted oxetanes (II) in the presence of a tertiary amine or tin-compound catalyst. Thus, 2-acryloyloxyethyl isocyanate was mixed in Et acetate containing dibutyltin dilaurate and reacted with 3-ethyl-3-(hydroxymethyl)oxetane, producing an oxetanyl group-containing methacrylate ester monomer (III).

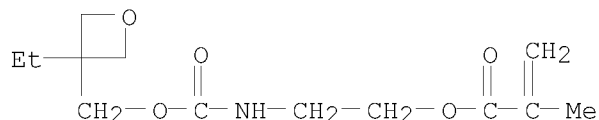
IT 862453-34-7P

RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation of polymerizable (meth)acryloyl group-containing oxetane monomers)

RN 862453-34-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[(3-ethyl-3-oxetanyl)methoxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 10:21:10 ON 27 APR 2007)

FILE 'CAPLUS' ENTERED AT 10:21:28 ON 27 APR 2007

L1 4682 S OXETANE
 L2 11113 S ACRYLOYL
 L3 28 S L1 AND L2
 L4 26 S L1 AND CARBAMATE
 L5 4 S L4 AND ISOCYANATE

FILE 'STNGUIDE' ENTERED AT 10:48:08 ON 27 APR 2007

FILE 'CAPLUS' ENTERED AT 10:51:10 ON 27 APR 2007

FILE 'STNGUIDE' ENTERED AT 10:51:10 ON 27 APR 2007

FILE 'CAPLUS' ENTERED AT 10:52:52 ON 27 APR 2007

FILE 'STNGUIDE' ENTERED AT 10:52:54 ON 27 APR 2007

FILE 'CAPLUS' ENTERED AT 10:59:08 ON 27 APR 2007

FILE 'STNGUIDE' ENTERED AT 11:06:11 ON 27 APR 2007

FILE 'REGISTRY' ENTERED AT 11:09:10 ON 27 APR 2007

L6 STRUCTURE UPLOADED
 L7 0 S L6 FUL
 L8 STRUCTURE UPLOADED
 L9 0 S L8 FUL
 L10 STRUCTURE UPLOADED
 L11 0 S L10 FUL

L12 STRUCTURE UPLOADED
L13 19180 S K12 FUL
L14 1 S L12 FUL

FILE 'CAPLUS' ENTERED AT 11:22:45 ON 27 APR 2007
L15 1 S L14

=>

=>

Executing the logoff script...

=> LOG H

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	12.32	993.16
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.78	-68.64

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:31:59 ON 27 APR 2007